

Aalto University

School of Science

Programme in Industrial Engineering and Management

Jani Sakari Laakkonen

Identifying Indirect Purchasing Development Potential in a Manufacturing Company

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Supervisor: Prof. Kari Tanskanen

Instructor: M.Sc. Eija Repo

Author: Jani Sakari Laakkonen		
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Supervisor: Prof. Kari Tanskanen		
Instructor: M.Sc. Eija Repo		
<p>The purpose of this study is to find out how indirect purchasing can be developed in a manufacturing company. The study takes place in an international consumer product manufacturer and therefore the research method is a single case study. Three different sources of information are used to answer the research question, including a spend analysis, semi-structured interviews and self-administrative questionnaire. A thorough literature review creates a foundation for the empirical study.</p> <p>This study shows that the case company can achieve several advantages by managing indirect purchasing as a whole. First of all, the availability and visibility of the indirect purchasing data should be developed. In addition, the company should create a common policy and strategy for indirect purchases. Secondly, the case company should focus on improving the purchasing process and its activities. The most potential development opportunities within the purchasing process are using an adequate purchase order, following-up and evaluating suppliers systematically and actively, and negotiating and contracting professionally.</p> <p>A natural way for developing indirect purchasing is to involve the Sourcing department in managing and conducting indirect purchases. Based on this study the case company can achieve at least from 3,4% to 5,7% cost-savings of the total indirect spend. Developing indirect purchasing should be started from personnel and operating services categories. In addition to cost-savings involving the Sourcing department can lead to better visibility, more standardized and efficient purchasing process, reduced risks, better contract terms and resources being released to primary tasks.</p>		
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<p>Tämän tutkimuksen tarkoituksena on selvittää, miten epäsuoria hankintoja voidaan kehittää valmistavassa yrityksessä. Tutkimus toteutetaan kansainvälisessä kuluttajatuotteita valmistavassa yrityksessä, jonka vuoksi tutkimusmetodi on yksittäinen tapaustutkimus. Tutkimuskysymykseen vastataan hyödyntämällä kolmea tietolähdettä: spendianalyysi, teemahaastattelut ja itsenäisesti täytettävä kysely. Perusteellinen kirjallisuuskatsaus muodostaa perustan empiirilliselle tutkimukselle.</p> <p>Tämä tutkimus osoittaa, että kohdeyritys voi saavuttaa useita hyötyjä johtamalla epäsuoria hankintoja kokonaisuutena. Ensimmäiseksi epäsuorien hankintojen informaation saatavuutta ja näkyvyyttä tulee kehittää. Lisäksi yrityksen kannattaa muodostaa yhteinen toimintatapa ja strategia epäsuorille hankinnoille. Toiseksi kohdeyrityksen tulee keskittyä hankintaprosessin ja sen toimintojen parantamiseen. Potentiaalisimmat kehitysmahdollisuudet hankintaprosessissa ovat riittävän ostotilauksen tekeminen, toimittajien seuranta ja arviointi sekä neuvottelemine ja sopimusten teko.</p> <p>Luonnollinen tapa epäsuorien hankintojen kehittämiselle on Sourcing osaston tuominen osaksi epäsuorien hankintojen johtamista ja tekemistä. Tämän tutkimuksen perusteella kohdeyritys voi saavuttaa vähintään 3,4 – 5,7 prosentin kustannussäästöt epäsuorien hankintojen kokonaiskuluista. Epäsuorien hankintojen kehittäminen tulee aloittaa henkilöstö- ja käyttöpalvelu (<i>engl.</i> personnel and operating services) kategorioista. Kustannussäästöjen lisäksi Sourcing osaston mukaan ottaminen voi johtaa parempaan näkyvyyteen, standardisoidumpaan ja tehokkaampaan hankinta prosessiin, pienempiin riskeihin, parempiin sopimusehtoihin ja resurssien vapautumiseen ensisijaisia työtehtäviä varten.</p>		
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Opening words

This study aims for identifying the development potential of indirect purchasing in a manufacturing company. For the past two years I have studied Industrial Engineering and Management which encompasses a wide variety of different subjects. From the early beginning I have chosen courses related to supply management as much as possible. Reasons for emphasizing supply management in my studies are the natural curiosity and attraction to this continuously developing topic. My knowledge in supply management and especially in indirect purchasing has developed even further in the past months, and I have used my whole expertise to make this thesis as valuable to the company as possible not forgetting the scientific aspect.

For the past few years I have prioritized my studies before anything to make the most of this opportunity. I feel that I have been successful in my studies and the biggest factor has been my wife who has supported me every day even though our common time has reduced due to my efforts. Thank you for your understanding and giving me tons of energy in the most pressing situations. I also want to thank my mom who has never demanded me to do anything that I do not want to or like, but instead have always trusted in me and my decisions.

Finally I want to thank Jukka for giving me the opportunity to do this study in such an inspiring atmosphere and from an extremely interesting topic. I also want to thank Eija and Kari for supervising my study and giving their admirable expertise in to my use. Moreover, I am thankful for the whole Global Sourcing team who have taken me as part of their group and helped me whenever needed.

Espoo, September 30th 2015

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List of Abbreviations

COGS	Cost of Goods Sold
EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortization
ERP	Enterprise Resource Planning
HR	Human Resources
IPR	Intellectual Property Rights
NPD	New Product Development
NPR	Non-Product Related
OPEX	Operating Expense
P2P	Procure-to-Pay
PO	Purchase Order
PSM	Purchasing and Supply Management
R&D	Research and Development
RFI	Request for Information
RFP	Request for Proposal
RFQ	Request for Quotation
SMI	Supplier Market Intelligence
TCO	Total Cost of Ownership

1 Introduction

1.1 Background

Background of the research topic

The importance of purchasing goods and services has been long recognized (see e.g. Kraljic, 1983). However, only recently the purchasing and supply management (PSM) has received growing attention from academics and practitioners (e.g. van Weele, 2010; Porter, 1999). The interest from, for instance, business consultants, general managers and financial managers is larger than ever as they have realized the potential of managing purchasing and supplier relationships for huge improvements (van Weele, 2010). Improvements in PSM drivers such as supplier management, cross-functional integration, strategy development, human resource management, and PSM controlling are contributing together directly into PSM outcomes, including cost, quality and innovation performance. Moreover, the improvements in cost and quality performance lead to positive financial outcomes. (Hartmann et al., 2012)

The portion of external resources bought from outside of the company is often more than 50% of the cost of goods sold (COGS) (van Weele, 2010), and when the indirect and investment types of purchases are taken into account the overall share of the purchases in the total costs of industrial companies can increase to as large as 80% (Iloranta and Pajunen-Muhonen, 2012). Even though the recognition of the purchasing has increased, most of the studies are still concentrating on the materials and services which are directly part of the offering of the company to their customers. The purchasing of indirect goods and services has received significantly less attention from academics (Cox et al., 2005; van Weele, 2010) but this is about to change (van Weele, 2010).

Indirect spend contains all those goods and services purchased that will not end up in those products or services that the company is delivering to its customers (Carter et al., 2003). Indirect spend can be even higher than the direct purchasing spend (van Weele, 2010; Rudzki and Trent, 2011) and on average, indirect and direct purchasing spends are equal. The percentage of indirect spend varies between industries and in consumer product industry it is around 54%. (Carter et al., 2003) Therefore, it seems obvious that companies in consumer product industry should pay great attention on their indirect spend.

Background of the Company

The case company is a multinational company whose headquarter is located in Finland. The company is active in consumer product business in over 20 different countries. Net sales of the company were over 700 MEUR in 2014 and over 50% came from Europe and 30% from Americas. The company employs almost 5000 employees and has 10 own factories around the world.

The case company has a Global Sourcing function which is mainly responsible for sourcing finished goods, raw materials and components for different business areas. Personnel in the Global Sourcing function are divided for several offices around the world and there are around 80 sourcing professionals all together. The Global Sourcing function is basically not involved in indirect purchasing except logistics. The company has already created suitable categories for indirect purchases but otherwise the current state of indirect purchasing has not been investigated.

1.2 Research problem, objectives and limitations

According to Carter et al. (2003) managers in large corporations are paying more attention to indirect spend than before. Even though the significance of indirect spend has been recognized by many authors (e.g. van Weele, 2010; Rudzki and Trent, 2011), there are still not much extant literature and studies about indirect purchasing.

A systematic literature review did not reveal any former studies about identifying development potential regarding indirect purchasing. Some authors have discussed about potential development opportunities in direct purchasing though (e.g. Iloranta and Pajunen-Muhonen, 2012; van Weele, 2010). This study tries to fill the gap in the literature and identify whether the same development opportunities exist in indirect purchasing or not. Moreover, the current study enhances our understanding about how indirect purchases are performed in a manufacturing company and what are the typical challenges faced by the buyers.

The case company has been growing recently both organically and through several acquisitions. Accordingly the number of people conducting indirect purchasing has grown rapidly. It is typical that indirect purchases are performed by the end-users all around the organization (de Boer et al., 2003b) and this is also the situation in the case company. There are currently no company-wide policy for indirect purchases and no visibility for indirect spend, and therefore it sounds evident

that the company could achieve advantages through developing indirect purchasing. However, in order to achieve improvements the case company needs to first identify the opportunities.

The research problem can be described as follows:

- How indirect purchasing can be developed in a manufacturing company?

The study is outlined to the case company and more specifically its indirect purchases. Logistics are already managed by the Global Sourcing function and therefore they will be considered only slightly. Even though indirect purchases include a wide range of goods and services, they will be considered as a whole in this study. This study does not try to identify best practices but instead it aims for finding areas which have the most potential opportunities.

1.3 Methodology and structure of the study

This study can be divided into two parts; a literature review and an empirical study. The literature review is conducted for the chosen body of knowledge, including purchasing in general, indirect purchasing and developing purchasing. The purpose of the literature review is to create a foundation for the empirical study and to develop a framework for identifying the potential development targets of indirect purchasing.

The literature is chosen by examining well known publications and following their source books to discover as much useful information as possible. In addition a systematic approach is used to discover any relevant literature that is published in the recent years and therefore could not yet be found from the older well known publications. Databases such as Emerald, ProQuest and ScienceDirect were used for searching suitable articles.

The empirical part of the study begins with a spend analysis for the indirect spend of the case company. In parallel to the analysis qualitative data is collected with semi-structured interviews for people who perform indirect purchases. The findings of the interviews are compared to the framework of the literature review and an online questionnaire is created based on them. In the end all the results are combined and recommendations are drawn for the case company.

The content of this study is as follows. First a thorough understanding of the extant literature in relevant topics is created with a literature review. Subsequently the methodology for the empirical part will be discussed in more detail before introducing the actual empirical study. The report is concluded with discussion and conclusions.

2 Literature review

This chapter encompasses the relevant literature related to the topic of the thesis and creates the theoretical foundation for the empirical work. The literature review starts with a general view in purchasing and its evolution towards a highly important function in any organization. Subsequently the discussion moves into indirect purchasing, including its typical characteristics and its management. Finally some typical development targets related to purchasing are identified and the involvement of purchasing department in indirect purchases is discussed. The comprehensive list of literature areas can be found below (Table 1).

Table 1 Body of knowledge

Purchasing	Indirect Purchasing	Developing Purchasing
<ul style="list-style-type: none">•Relevant concepts•Purchasing process•Organizing purchasing<ul style="list-style-type: none">•From reactive to proactive purchasing•Different roles of purchasing•Importance of purchasing	<ul style="list-style-type: none">•Categorizing indirect purchases•Direct vs. indirect purchases•Typical characteristics<ul style="list-style-type: none">•Maverick buying•Managing indirect <u>purchasing</u>	<ul style="list-style-type: none">•Spend analysis•Cost-savings opportunities•Typical pitfalls in purchasing process•Involving purchasing department in indirect purchasing

2.1 Purchasing

The objectives of purchasing are traditionally stated as acquiring

- the right quality of material
- at the right time
- in the right quantity
- from the right source
- at the right price (Baily et al., 2005).

The foregoing statement does not describe the modern purchasing very comprehensively. Iloranta and Pajunen-Muhonen (2012) have defined purchasing broader than many other scholars and their definition creates a great foundation for elaborating purchasing in general.

Every organization needs different products and services as well as distinct expertise and knowledge which need to be acquired from outside of the organization. These external resources are needed to operate, maintain, manage and develop the organization. Purchasing aims to satisfy the needs of the end customer while maximizing the total benefits for the company by exploiting the opportunities of supply markets. Therefore, it is entitled to say that purchasing is managing external resources of an organization. (Iloranta and Pajunen-Muhonen, 2012)

This section begins by defining the relevant concepts related to purchasing, describing a basic purchasing process and its main activities, and representing different organizational forms of purchasing. Subsequently the different roles of purchasing are discussed, including the evolution from reactive to proactive purchasing, and purchasing as an operational and strategic contributor. The chapter is concluded by discussing about the importance of purchasing to business.

2.1.1 Defining relevant concepts

Terms regarding buying and purchasing are very inaccurate. The same word can have various meanings, different terms are used across, and there rarely exists any unambiguous and commonly accepted terms. (Iloranta and Pajunen-Muhonen, 2012)

According to Burt et al. (2003) many organizations use the terms purchasing and procurement interchangeably. Also van Weele (2010) argue that there is a lack of agreement when it comes to defining terms related to purchasing. They have noticed that terms such as procurement, purchasing, sourcing and supply management are all used interchangeably. However, this section will distinguish between those terms.

Procurement is a wider concept than purchasing and it encompasses all those activities that are needed to get the product or service from an external supplier to its final destination (Iloranta and Pajunen-Muhonen, 2012). Based on van Weele (2010) those activities include the purchasing function, traffic and transportation, stores, delivery inspection, and quality control and assurance. They state that environmental issues are also considered as a part of procurement in many companies. Porter (1985) defines procurement as the function of purchasing inputs which are used in the value chain of the firm.

Supply Management is even wider concept than procurement and it is often used to encompass more than just the purchasing department and the procurement process (Burt et al., 2003). Monczka et al. (2011) refer supply management as a strategic approach which is used to plan and acquire the current and future needs of the organization through effective supply base management. According to Iloranta and Pajunen-Muhonen (2012) supply management includes for instance supply market intelligence (i.e. the knowledge of supplier markets and its logic) and analysis of new sources of supply. The term also covers considerations of centralizing the purchasing and reducing the number of suppliers. Moreover, developing suppliers, exploiting mutual innovations and cooperation with suppliers are considered as part of the supply management.

Sourcing is often associated to acting within global scope (Iloranta and Pajunen-Muhonen, 2012; van Weele, 2010). According to van Weele (2010) it encompasses actions like finding the best source of supply as well as selecting, contracting and managing it. Iloranta and Pajunen-Muhonen (2012) defines sourcing in more detail by stating that it means analyzing the sources of supply, and ensuring the availability, continuity of the deliveries and alternative sources of supply. Moreover, enhancing knowledge regarding supplier markets is often associated to the term sourcing.

It is easy to conclude from the above definitions that Iloranta and Pajunen-Muhonen (2012) were correct when arguing that terms regarding buying and purchasing are very inaccurate. The evolution of purchasing may have adapted the terms and most likely will continue doing so in the future. Many of the terms (see e.g. definitions of supply management and sourcing) encompass same activities and therefore it is difficult to make a clear distinction between them. In this study the foregoing terms are used interchangeably and in their widest meanings.

2.1.2 The purchasing process

There is no all-embracing purchasing process which would be suitable in every purchasing situation. Different phases of typical purchasing process and its main activities have been discussed in many academic writings (e.g. Baily et al., 2005; Burt et al., 2003; Iloranta and Pajunen-Muhonen, 2012; Johnson et al., 2011; Novack and Simco, 1991; van Weele, 2010). By combining the most common activities of the foregoing sources, a comprehensive list of activities was developed (Figure 1). The activities are positioned under different stages of the purchasing process but in many cases one activity could be placed in another phase as well. Therefore, different phases are often overlapping and the process is also iterative by its nature.

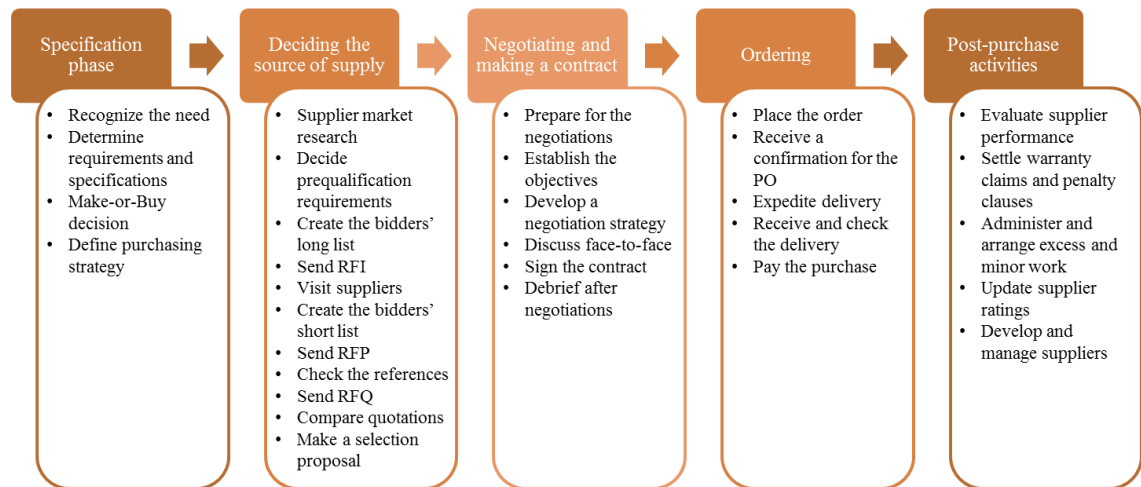


Figure 1 Purchasing process and its main activities (adapted from Baily et al., 2005; Burt et al., 2003; Iloranta and Pajunen-Muhonen, 2012; Johnson et al., 2011; Novack and Simco, 1991; van Weele, 2010)

Before going deeper into each stage of the purchasing process, one should note that all of the stages are gone through only rarely. Most of the purchasing situations are so-called *straight rebuys* which means that the firm is buying known products or services from a known supplier and there is already made some kind of frame agreement with the supplier. The purchasing process is passed through most comprehensively when the firm is purchasing a product or service which they have not purchased before and which is supplied by an unknown supplier. This type of purchases can be called as *new-task situations*. The *modified rebuy* takes place when either the product or service, or the supplier is unknown. (van Weele, 2010)

Specification phase

The purchasing process begins when a company recognizes that something new or existing is needed (Novack and Simco, 1991). Need is considered thoroughly from different perspectives, its financial influences are assessed and various possibilities of supplier markets are thought. The most important work is already done in this phase before the actual purchase task. (Iloranta and Pajunen-Muhonen, 2012)

The buying company needs to make a decision should they produce the product or service themselves or is it more rational to purchase it from an external supplier. This is also called as the *make-or-buy* decision. (Iloranta and Pajunen-Muhonen, 2012; van Weele, 2010) Another matter to be considered is whether to buy a broad completeness with same contract or in smaller

pieces from distinct suppliers (Iloranta and Pajunen-Muhonen, 2012). In order to make such decisions the requirements for the purchase are determined (van Weele, 2010).

One of the very first activities is to develop and document *purchase order specification*. This includes, for instance quality, logistics, maintenance, legal and environmental specifications, and a target budget for the purchase. In order to avoid extra work in later phases the specifications should be approved by purchasing or some potential suppliers. (van Weele, 2010)

Before moving to the next phase a strategy for conducting the purchase should be created and documented. It should include a plan, description and timetable for the progress and course of actions in different phases. Essential criteria for choosing the supplier should be determined tentatively and they can be elaborated later. (Iloranta and Pajunen-Muhonen, 2012)

Deciding the source of supply

In order to make the best possible supplier selection a thorough supplier market research should be conducted (van Weele, 2010). It is important to understand the type of the market as it helps to determine how many suppliers there are in the market, what kind of power dependency there lies and which would be the most suitable method of buying (e.g. negotiations, competitive bidding, etc.) (Novack and Simco, 1991). Burt et al. (2003) have listed some potential sources for discovering potential suppliers, including supplier web sites, trade journals, own contact network and supplier catalogs, just to mention few.

In addition to finding new suppliers from the market, it is common that companies keep a list of approved vendors where from to choose suppliers into the so-called *bidders' long list*. A request for information (RFI) is sent to the suppliers in the long list and it can include any kind of information which can help in qualifying the suppliers for the order. If there are new suppliers in the long list, it may be necessary to visit their facilities to ensure their capabilities. (van Weele, 2010).

For those suppliers who are still considered after receiving the RFIs, a request for proposal (RFP) can be sent. This means basically that suppliers are asked to propose their solution for the problem of the buying company. This type of uncommitted proposals can raise new ideas that the company had not even thought. In addition it is wise to ask some references from former clients. This is especially important in large and unique projects. (Iloranta and Pajunen-Muhonen, 2012)

Next the number of suppliers is typically reduced to contain from three to five suppliers who form the so-called *bidders' short list*. Suppliers who qualify this far are sent a request for quotation (RFQ). The idea behind RFQ is to get the bids in a form where they can be easily compared. (van Weele, 2010) The RFQ should be created by exploiting ideas from various suppliers (Iloranta and Pajunen-Muhonen, 2012).

A preliminary technical and commercial evaluation is performed after receiving the quotations. All relevant aspects should be considered, including technical, quality, logistic, financial and legal aspects. In addition the *total cost of ownership* (TCO) needs to be assessed. Shortly TCO encompasses all the costs caused to the buying company during the lifetime of the purchased product or service. Van Weele (2010) also suggest buyers to create a supplier selection proposal in this phase. It should include the actual decision for choosing a supplier, reasons for the decisions and all of the quotations which were considered. (van Weele, 2010)

Negotiating and making a contract

In order to make the most of the purchasing process, negotiating should be utilized as a part of making the supplier decision. Burt et al. (2003) define *negotiation* as a process which aims to mutual agreement of a buyer and seller through planning, reviewing and analyzing. The agreement does not contain only price but instead all aspects of the business are included. (Burt et al., 2003)

One important matter to be noted when discussing about negotiating is that there can be many winners. This is the case in the most successful business negotiations and it can be called as *win-win* (Burt et al., 2003), *collaborative* or *integrative* negotiating (Lysons and Farrington, 2012). Naturally both sides cannot win equally and high expertise in negotiations helps to achieve better results (Burt et al., 2003).

Burt et al. (2003) argue that negotiations encompass three different phases, including preparation, face-to-face discussions and debriefing. The preparation phase is the most important and in successful negotiations more than 90% of the total length may be invested in this phase.

There are several issues to be considered when preparing for the negotiations. One thing is that the negotiator should have great knowledge of the product or service being purchased. It is also important to analyze the bargaining power between the seller and buyer. A thorough cost and price analysis helps in succeeding in the actual face-to-face discussions. In addition better knowledge regarding the seller pays off eventually. If the other side is from another culture, it is

highly recommended to understand the differences between cultures. It can be concluded that bigger thoroughness gives better prerequisites for the actual face-to-face discussions. (Burt et al., 2003)

Before heading to the face-to-face discussions one should still first establish desired objectives and identify what would be the most suitable type of relationship between the buying company and the supplier (Burt et al., 2003). Objectives can be divided into three parts, including the ideal result, worst acceptable contract and a backup plan if the worst acceptable contract cannot be achieved (Iloranta and Pajunen-Muhonen, 2012). There are number of different techniques for conducting the actual face-to-face discussions (see e.g. Burt et al., 2003) and the technique should be chosen when creating a strategy for the discussions (Iloranta and Pajunen-Muhonen, 2012).

One important thing that is often neglected by the practitioners is debriefing after negotiations. By thoroughly analyzing what worked well and what did not the negotiator can develop his or her negotiation skills tremendously. Moreover, it should be noted that negotiating is not the only option but instead, for instance competitive bidding or reverse auction can be used in some situations. (Burt et al., 2003)

According to van Weele (2010) there are four different types of price arrangements in the contracts. First option is *fixed price plus incentive fee* where the incentive can relate, for instance to cost reductions, improved deliveries or better quality. *Cost-plus* contract means that the buyer pays the costs and a scheduled fee which can be either fixed or percentage based, and there might be a guaranteed maximum amount. Van Weele (2010) argue that this is often the most costly option to the buyer.

The other two types of price arrangements are *cost-reimbursable* contract and *agreement with price-adjustment*. In the former the hourly rates for labor and equipment are often fixed, and therefore it is recommended for the buyer to add some kind of bonus or penalty clauses to increase the incentives. The latest contract type links the price to some external factors, for example material costs. (van Weele, 2010)

Other typical matters to be agreed on a contract are, for instance, how and when the payment takes place, penalty clauses and warranty conditions if something goes wrong, insurance and safety regulations, specific terms of delivery, contracting out to third parties, and transfer of

rights and obligations. Naturally the matters to be agreed and the content of the contract depend highly on the product or service being purchased. (van Weele, 2010)

Ordering

Ordering can take place either by a separate purchase order (PO) or the contract can act as the purchase order. The former is usually the case with routine purchases. In those situations the company usually makes a longer contract (i.e. one year or longer) with the supplier and POs can be then placed without signing a new contract every time. (van Weele, 2010)

The PO is usually placed electronically (van Weele, 2010) but it can also be placed by telephone (Johnson et al., 2011). It is highly recommended to perform all purchases with written or computer generated documentation. Therefore, if the PO is placed by telephone, a written order should be placed in addition. (Johnson et al., 2011)

The form of the PO can vary greatly. Johnson et al. (2011) and van Weele (2010) are of one mind that it should include at least an order number, product or service description, number of units required and unit price, and the expected delivery date. Johnson et al. (2011) also highlight the importance of conditions governing the order. They can be either stipulated in the PO or the sales agreement. Usually both parties are desirous to use their own terms. (Johnson et al., 2011)

After the PO has been placed the buyer can either follow the delivery process passively or try to actively ensure that promised delivery dates are complied with. The latter action is called as *expediting* and it should be used only rarely. (Johnson et al., 2011) There are three different types of expediting. One option is to contact the supplier when the delivery is already late. However, preventive options, such as contacting the supplier few days before delivery or checking progress at regular intervals, are more recommended. (van Weele, 2010)

Next important activity is to receive and inspect the delivery. According to Johnson et al. (2011) there are five prime purposes for thorough inspection of the delivery as follows:

- To make sure that the correct order has arrived
- To inspect the condition of the delivery
- To count that the right amount of units has arrived
- To forward the delivery to its final destination (i.e. storage, inspection or use)
- To make sure that the receipt is registered and appropriate parties can access it

The final activities in the ordering stage are invoice clearing and payment. Clearing invoices can happen through paper-based process or an electronic procurement system. Typical process for clearing invoices includes matching data from the purchase order to both the invoice and receiving. If everything is as agreed, accounting issues the payment. Clearing invoices can take place in purchasing or accounting departments, or the two can be aligned together. (Johnson et al., 2011)

Post-purchase activities

The purchasing process can be seen to continue even when the payment has been performed. There can be activities such as settling warranty claims and penalty clauses, managing some excess and minor works, and finalizing and documenting the evaluation of the project and the supplier. It is extremely important to keep some type of vendor rating which can include competitiveness, innovativeness, and quality and delivery record of the supplier. With a professional vendor rating system the company can reduce its supply base and centralize its purchases to the best performing suppliers. (van Weele, 2010)

Johnson et al. (2011) state that there are number of records to be maintained, including a comprehensive documentation of the purchase orders, supplier history, valid contracts, classification of items purchased and a database of suppliers. In addition it may be sensible to document labor contracts, tool and die records, minority and small business purchases, and bid-award history which show the reasoning behind every decision. In some situations a closer relationship with some suppliers can be rational and especially then the buying company should try to manage and develop its suppliers. (Johnson et al., 2011)

2.1.3 Organizing purchasing within a company

There are three common organizational models for organizing the purchasing department. *Centralized* purchasing means that all or almost all of the purchasing is performed through a centralized purchasing department. In *decentralized* structure different business units are responsible for independently conducting all activities related to purchasing. *Hybrid* structure is a combination of the former two and it aims to utilize advantages and to avoid disadvantages from both centralized and decentralized structures. (van Weele, 2010)

Johnson and Leenders (2004) studied, for instance, what is the most popular organizational structure and they found that the hybrid model is by far the most popular. They have done the same study in 1987, 1995 and 2003, and the popularity of the hybrid model has only increased.

In the most recent study they had five options instead of three, including decentralized, decentralized hybrid, hybrid, centralized hybrid and centralized. Almost 41% of the respondents have centralized hybrid organization structure in use when it comes to purchasing. In every study centralized structure has outweighed decentralized structure. (Johnson and Leenders, 2004)

There are no unambiguous answer for which of the organizational structures should be used but instead companies may need to change their way of acting as their business evolves over time (van Weele, 2010). There was found several advantages for both the centralized and decentralized structures in the extant literature (Baily et al., 2005; Iloranta and Pajunen-Muhonen, 2012; Leenders and Johnson, 2000; van Weele, 2010) and a comprehensive list of relevant advantages can be found below (Table 2).

Table 2 Advantages of different organizational structures (adapted from Baily et al., 2005; Iloranta and Pajunen-Muhonen, 2012; Leenders and Johnson, 2000; van Weele, 2010)

Advantages of centralization	Advantages of decentralization
Increased bargaining power	Faster response time to changes
Uniform prices and terms between units	Easier coordination with business unit
Enhanced inventory management	Efficient use of local sources
Standardized procedures and policies	Autonomy of business units
Increased purchasing expertise	Simplicity of reporting line
More efficient planning and research	Tighter control by local management
Facilitated management of suppliers	Better know-how of own needs
Standardized products and suppliers	Broader job description
More efficient purchasing organization	

2.1.4 From reactive to proactive purchasing

Traditionally purchasing is thought mainly as performing ordering and replenishment type of activities (Baily et al., 2005). Iloranta and Pajunen-Muhonen refer to a study by Aminoff et al. (2002) which found that 47% of the time of purchasing professionals went to operational tasks, such as ordering, logistical arrangements, payment transactions, delivery inspections and handling reclamations. Only 14% of the time was spent to strategic tasks, such as planning and controlling activities, personnel management, developing activities, reporting, involving in managing the company and operative development work. Rest of the time (i.e. 34%) went to tactical tasks, including negotiating and contracting, collaboration with other functions, supplier cooperation, and measuring and reporting. (Iloranta and Pajunen-Muhonen, 2012)

Nowadays emphasis is increasingly moving towards activities such as total cost reduction (TCO), negotiating longer-term relationships and supplier development. This means basically that companies are not anymore reacting only to demand when it emerges but instead they are proactively trying to contribute to different matters. Baily et al. (2005) compared the differences between reactive and proactive buying (Table 3). (Baily et al., 2005)

Table 3 From reactive towards more proactive purchasing (Baily et al., 2005)

Reactive buying	Proactive buying
Purchasing is a cost centre	Purchasing can add value
Purchasing receives specifications	Purchasing (and suppliers) contribute to specifications
Purchasing rejects defective material	Purchasing avoids defective supplies
Purchasing reports to finance or production	Purchasing is a main management function
Buyers respond to market conditions	Purchasing contributes to making markets
Problems are supplier's responsibility	Problems are a shared responsibility
Price is key variable	Total cost and value are key variables
Emphasis on today	Emphasis strategic
Systems independent of suppliers	Systems may be integrated with suppliers' systems
Users or designers specify	Buyers and suppliers contribute to specification
Negotiations win/lose	Negotiations win-win (or better)
Plenty of suppliers = security	Plenty of suppliers = lost opportunities
Plenty of stock = security	Plenty of stock = waste
Information is power	Information is valuable if shared

Lost opportunities of passive purchasing

There have risen a large amount of new opportunities in utilizing supplier markets in the last few decades (Iloranta and Pajunen-Muhonen, 2012). However, organizations that have a reactive or “passive” (Ellram and Carr, 1994) approach to purchasing may not be able to fully exploit those opportunities. Iloranta and Pajunen-Muhonen (2012) have described how one can identify passive purchasing and what kind of influences it may have. (Iloranta and Pajunen-Muhonen, 2012)

It is common that identifying all purchases from a financial statement is fairly difficult, if possible at all, as they often diverge under several topics. Reports regarding purchasing do not usually provide detailed information. Recorded payments can tell who is the supplier but not the content of the purchase. For these reasons it may be difficult for the top management to realize

the whole development potential and importance of purchasing. (Iloranta and Pajunen-Muhonen, 2012)

Passive purchasing can also lead to not exploiting the whole negotiation power of the organization. In many organizations purchases are scattered around the organization. Overlapping work might be done by several people, including searching for suppliers, negotiating, selecting and making contracts. It is also possible that the company purchases same products or services, and they might pay various prices for them. Additional costs will result from small delivery and billing charges. When purchases are done part-time there is rarely time to develop as expert in neither purchasing nor supplier market knowledge. (Iloranta and Pajunen-Muhonen, 2012)

In order to get maximal advantages of purchasing expertise and supplier market knowledge, they need to be exploited early in the process of developing new product or service idea. This is often difficult as cooperation between functions can be rare and there might be some internal power struggles as well. Too often purchasing expertise is involved in the negotiation stage after all the decisions regarding components, materials and even supplier is made. There is not much that purchasing can do in that position. (Iloranta and Pajunen-Muhonen, 2012)

Lack of resources and purchasing expertise are typical problems of traditional purchasing. Most of the time is used to negotiate about details, to handle and solve operative problems, to supervise deliveries and so forth. Cooperation with the supplier is basically developed only if there occurs major problems, and new suppliers are selected in a hurry without sufficient considerations. The world is changing rapidly, and therefore significant and up-to-date supplier market knowledge can help a company to gain competitive advantage over its competitors. (Iloranta and Pajunen-Muhonen, 2012)

Companies purchase a wide range of products and services with different type of characteristics. It is not often sufficient to put more effort on the most important ones but they should also be handled in very different ways. Products and services should be categorized in a meaningful way based on the strategy of the company. This helps to identify supplier market opportunities, exploit power of the competition and enhance processes. (Iloranta and Pajunen-Muhonen, 2012)

A traditional belief has been that price and costs are dictated by the market. That is not true. Price and costs are always dictated as a result of purchasing knowledge and negotiation process. By preparing thoroughly to negotiations it is possible to achieve great results. Preparing includes

for instance analyzing and modelling the risks and cost factors, and planning and conducting a negotiation strategy. Checking the background of the negotiator of the supplier company can also give advantages to the negotiations. (Iloranta and Pajunen-Muhonen, 2012)

The final appearance of the passive purchasing mentioned by Iloranta and Pajunen-Muhonen (2012) is that suppliers and supplier network are not controlled. Traditional way of thinking says that organization cannot influence its external resources. It was thought that the power of competition will make sure that suppliers work efficiently. Many great opportunities of collaboration and enhanced power of competition are lost with this type of mindset. (Iloranta and Pajunen-Muhonen, 2012) List of lost opportunities and their typical characteristics of the passive purchasing are below (Table 4).

Table 4 Lost opportunities of passive purchasing (adapted from Iloranta and Pajunen-Muhonen, 2012)

Lost opportunity	Typical characteristics
Scattered and inadequate reporting	Purchases are diverged under several topics in financial statements Reports regarding purchasing do not give detailed information Payment records do not directly tell anything about the content of the purchase
Unexploited bargaining power of the organization	Purchases are scattered into different profit centers and parts of organization Same type of products and services are purchased in different parts of organization There can be identified a lot of overlapping work Purchases are handled in part-time basis
Unexploited shared knowledge of the organization	Different functions are hiding in their own departments There can be identified internal power struggles Purchasing's task is only to negotiate prices after all decisions have been made
Lack of effort in finding opportunities of the supplier markets	Lack of resources and purchasing expertise Existing suppliers are evaluated only if there appears some major problems New suppliers are often selected in a hurry without sufficient considerations
All purchases are handled in the same way	Purchases are not arranged into different categories

Careless preparation to the negotiations	There are no alternative methods for different purchases
	Different supplier markets and competitive situations are not exploited
	Belief that price and costs are dictated by the markets
	Risks and cost factors are not analyzed and modelled before the negotiations
Supplier network and suppliers not controlled	Strategy and objectives are not planned before the negotiations
	Belief that the power of competition takes care of supplier's efficiency
	Organization's external resources are not actively influenced

2.1.5 Different roles of purchasing

Purchasing as an operational contributor

In a broad picture only the direct wages represent the usage of internal resources, and all the rest is exploiting external resources, in other words, purchasing. This means that the share of the purchases in a company can exceed 80 percent. (Iloranta and Pajunen-Muhonen, 2012)

It is easy to understand that there is a positive connection between maturity of the purchasing in a company and savings potential. However, it is interesting to find out that the company can identify larger savings when its development level is higher. Therefore, a low maturity purchasing unit cannot see the whole savings potential when beginning their first development actions but instead they will reveal more opportunities along the way. (Schiele, 2007)

Finding new suppliers, developing category strategies, modelling the total costs of the company and the supplier, controlling supplier relationships and developing new ways of measuring and giving feedback to suppliers are some of the responsibilities of the purchasing in a company. Searching for new suppliers enhances systematic supplier market intelligence (SMI) which eases searching and selecting suppliers in the following initiatives, and guides for distinguishing new opportunities. (Iloranta and Pajunen-Muhonen, 2012)

Developing category strategies with cross-functional teams lead own organization to consider the best combinations of customer needs, supply market opportunities and own core know-how, and it helps realizing new type of product and service viewpoints. In order to understand the whole purchasing process, and the most important factors in the supply chain and network, the

total costs of the company and its supplier need to be modelled. (Iloranta and Pajunen-Muhonen, 2012)

Nowadays, companies pay more attention to buyer-supplier relationships and relations are more collaborative by their nature. This type of cooperation enhances the understanding of the challenges in production and service processes, and teaches to find new development opportunities. Better methods for measuring and giving feedback to suppliers educate companies to control their suppliers and especially the most critical phases of the supply chain. (Iloranta and Pajunen-Muhonen, 2012)

The foregoing activities show that companies can improve operational effectiveness through professional purchasing. According to Porter (1996) managers often fail to distinguish between operational effectiveness and strategy. Operational effectiveness is defined as conducting the same activities than rivals but only better. Besides efficiency, it includes also better quality and reduced lead time. Strategy comprises the long-term direction of the company, and all the decisions and actions that have an impact to the direction (Slack et al., 2011).

Purchasing as a strategic contributor

The strategic influences of purchasing can be significant. Improved operational effectiveness has a direct impact to the competitiveness of the company and furthermore the strategic position of the company can be affected by modifying the supplier network. (Iloranta and Pajunen-Muhonen, 2012)

According to Reck and Long (1988) purchasing can achieve the role of a strategic contributor by evolving through four progressive stages. The stages are passive, independent, supportive and integrative. In the passive stage the purchasing function does not have strategic direction and it primarily takes actions when it is requested by another function. Independent purchasing function has a strategic direction which is not dependent on the competitive strategy of the firm. The latest techniques and practices are already adapted by the independent purchasing function.

Also supportive purchasing function adopts purchasing techniques and practices but it does it to support the competitive strategy of the firm, and its purpose is to strengthen the competitive position of the company. Integrative purchasing function is the most developed stage and, in that stage, the strategy of the purchasing is fully integrated into the competitive strategy of the company. Purchasing also participates in formulating and implementing a strategic plan with other functional peers. (Reck and Long, 1988)

It is important to note that the purchasing function as a strategic contributor cannot develop over time without putting additional efforts. In addition it does not happen overnight. In the first three stages purchasing managers can guide development of the purchasing with their vision and commitment. Top management gets main responsible after the appropriate supplier networks, skills, expertise, and information system have been developed. Role of the top management is to enable the purchasing function to contribute to the firm's competitive success by changing the prevailing attitudes and possible misconceptions of non-purchasing managers. (Reck and Long, 1988)

2.1.6 Importance of purchasing to business

As mentioned earlier, purchases can account a significant amount of the firm's costs which already indicates high savings potential through purchasing. There are also some real evidence that purchasing expertise shows in the bottom line of the company (e.g. Hartmann et al., 2012; Reinecke et al., 2007).

Reinecke et al. (2007) found that companies that have higher level of purchasing expertise gain larger annual savings from purchasing and supply management. Those companies that had high level of purchasing expertise achieved on average over 3% annual cost savings whereas companies with low level of purchasing expertise could not achieve even 1% annual savings.

The foregoing study (Reinecke et al., 2007) emphasized that companies with low level of purchasing expertise thought purchasing as a support function. However, they found that companies with high level of purchasing expertise had 5% better EBITDA (earnings before interest, taxes, depreciation, and amortization) which shows that there is a positive correlation between purchasing expertise and success of the company. The study also showed that the influence of purchasing people's expertise and talent was more significant than any other measured best practice.

Hartmann et al. (2012) studied influence of five different PSM drivers, including supplier management, cross-functional integration, strategy development, human resource management and PSM controlling. They found that the foregoing PSM drivers contribute to the financial success of the company through improved PSM outcomes, such as cost reduction and improved quality.

Based on the foregoing studies it seems obvious that purchasing can reduce the costs of the company. The great thing about reducing costs is that it has bigger contribution to profits than

equal increase in sales (Iloranta and Pajunen-Muhonen, 2012; Lysons and Farrington, 2012). The following table (Table 5) simplifies how increase in sales and reduction in costs contributes to profits of the company.

Table 5 Contribution of increased sales and reduced costs to profits of the company (adapted from Lysons and Farrington, 2012)

SALES			
Then	Now	Increase	Extra profit
100 000 €	120 000 €	20%	2000 € (with 10% on turnover)
PURCHASING			
50 000 €	48 000 €	-4%	2 000 €

According to Iloranta and Pajunen-Muhonen (2012) there are several other ways how purchasing can influence the profitability and growth of the company. With purchasing and supply management it is possible to impact on all elements of competitiveness and profitability, including costs, margins, turnover, sales, invested capital, flexibility, reputation, corporate image and strategic position.

2.2 Indirect purchasing

There are several definitions for indirect purchasing but they all seem to be unanimous about the fact that it includes materials and services which are not directly part of the finished product or service of the company (e.g. Heikkilä et al., 2013; Iloranta and Muhonen, 2012; Payne and Dorn, 2012). De Boer et al. (2003a) are using the concept of non-product related goods and services instead of indirect and their definition adds that non-product related purchases are those goods and services which are not in the primary operations of the company. The concepts of non-product related and non-traditional are used synonymously in the extant literature (see de Boer et al., 2003b). Moreover, some academics use also the concept of minor procurement to describe the same matter (Haake and Seuring, 2009). In this particular thesis all of the four concepts (i.e. indirect, non-product related, non-traditional and minor) are used as synonyms.

This section concentrates on indirect purchases and more specifically categorizing different indirect goods and services, differences compared to direct purchases and typical characteristics of indirect purchases. In addition one typical challenge related to indirect purchasing, maverick buying is discussed. The section is concluded by representing some options for managing indirect purchasing in an organization.

2.2.1 Categorizing indirect goods and services

There are various ways of categorizing indirect goods and services (see e.g. Carter et al., 2003; Iloranta and Pajunen-Muhonen, 2012; Kapoor and Gupta, 1997; Payne and Dorn, 2012; Porter, 1999), and the most suitable categorization depends always on the company. It should be noted that a product or service which is indirect for one company might be direct for another (Iloranta and Pajunen-Muhonen, 2008). The categorization introduced by Iloranta and Pajunen-Muhonen (2012) is presented below (Table 6).

Table 6 Categorizing indirect purchases (adapted from Iloranta and Pajunen-Muhonen, 2012)

Group	Examples of content
Real Estate and Infrastructure	Buildings Technical systems and services Maintenance and repairs Security systems and services Energy Cleaning services Environmental services Moving services Waste collection and disposal Office furniture Research equipment
Human Resources	Luncheonette and catering Industrial protective clothing Health care Distractions Pension schemes Temporary labor Recruitment services Travel services Accommodation services Training and development services Professional services
Information technology	Equipment and devices PCs and software licenses ERP and IT systems Printers Data transmission networks Telephone systems and equipment Support services Information services

Office supplies	Office supplies Copiers Office services Printing papers Packaging materials Leaflets and marketing materials Books and trade journals
Other services	Transport services Market research services Communication and PR services Marketing and promotional services Media services Event services Legal services Financial services Administrative services

2.2.2 Differences between direct and indirect purchases

Heikkilä et al. (2013) studied different categories in a corporation called Nokia and listed some of the typical differences between direct and indirect purchases (Table 7).

Table 7 Comparing direct and indirect purchasing in Nokia (Heikkilä et al., 2013)

	Direct purchasing	Indirect purchasing
Stakeholders	Few, expert, global	Many, fragmented, with different maturity
Compliance to contract	Automatic	Highly variable and critical to value delivery
Supply markets	Global	Either global, regional or local
Active number of suppliers	100s	10,000s
Transactional processes	Fully automated	Semi-automated
Measuring cost benefits	Clear impact on Cost-of-Goods-Sold (COGS)	Impact on operational expenses (OPEX)

As can be seen from the above table, there are several differences between direct and indirect purchasing. The typical characteristics of indirect purchasing are discussed in more detail in the next section.

2.2.3 Typical characteristics of indirect purchases

Indirect purchases are often badly managed because only few companies have paid sufficient attention to them (Kapoor and Gupta, 1997). One of the main reasons may be the lack of attention from the management (Fearon and Bales, 1993) which does not sound sensible given the large amount of money that is involved in indirect purchases (de Boer et al., 2003a; de Boer et al., 2003b).

It is common that end-users are involved in the tactical phases of the purchasing and a dedicated purchasing unit may not be involved at all. Therefore, purchasing may take place all over the company (de Boer et al., 2003b) which is very challenging from administrative and managerial point of views (Carter et al., 2003). Moreover, people doing this type of purchases may not have expertise in cost or budget management and they do not have a formal education for instance in negotiating or even purchasing in general. Often spend management is not very high in their priority lists. (Payne and Dorn, 2012)

Often indirect purchasing practices are occasional (de Paoli, 1999) and a formal purchase order (PO) is rarely used or at least it does not encompass sufficient information about the content of the purchase. Additionally enterprise resource planning (ERP) systems are not used efficiently if they are used at all. (Payne and Dorn, 2012) The selection of suppliers is often done irrationally and personal relationships may have an impact to the selection (de Paoli, 1999).

There are many reasons for companies not to manage indirect purchases professionally (Kapoor and Gupta, 1997). For example, these types of purchases are seen as one time thing or they are not thought as part of the business focus of the firm (Payne and Dorn, 2012). Also the wide range of different goods and services, and sufficiently small order sizes are used as excuses (de Boer et al., 2003a). De Paoli (1999) argues that the supply base for indirect purchases is very large, transaction load is heavy and supply chains are often fragmented.

Kapoor and Gupta (1997) took a deeper stand on the reasons behind bad management of indirect purchasing. They found three major issues leading to bad management, including inadequate information, insufficient resources and improper techniques. Those three issues are discussed in more detail below.

Reasons behind bad management of indirect purchases

First obstacle in managing indirect spend is inadequate information. Accounting systems are not designed for purchasing purposes, there are thousands of codes and hundreds of users

interpreting the codes as invoices are processed. Therefore, accounts payable information is usually very inaccurate. In addition the nature of the indirect purchases makes it difficult to gain information such as volumes, quality, unit costs or pricing. (Kapoor and Gupta, 1997)

According to Kapoor and Gupta (1997) only 20% of indirect purchases are approved and negotiated through formal purchasing process. People conducting indirect purchases often do not have necessary sourcing and negotiating skills or they may have their own incentives leading sometimes to undesirable quality, timing and price. Moreover, companies tend to place their most capable resources in purchasing department when it comes to purchasing knowledge and therefore, people conducting indirect purchases do not have sufficient expertise. (Kapoor and Gupta, 1997)

The final reason behind bad management is the lack of improper techniques. This is due to two reasons; people tend to think that markets are perfect and on the other hand there is a lack of resources when it comes to indirect purchasing. Therefore, many companies only check arrangements with their current suppliers and renew or revise them without considering other options. Only less than one-quarter of indirect purchases passes through systematic scrutiny every year and almost 50% are not reviewed for years. (Kapoor and Gupta, 1997)

2.2.4 Maverick buying

Maverick buying or non-compliant purchasing behavior is a common phenomenon in many organizations but it has not been investigated much in the extant literature (Karjalainen et al., 2009). This section could have also been placed under the topic “Purchasing” as maverick buying can occur also with direct purchases. However, this type of behavior is typical particularly with indirect purchases (Iloranta and Pajunen-Muhonen, 2008; Karjalainen et al., 2009) and therefore it is presented in this section.

It is common that indirect goods and services are purchased around an organization by number of different people without having any person responsible for managing it. In such situation purchasing may become fully or partly as *maverick buying* in which every part of the organization or user acts based on own preferences and individual budget or other funding. (Iloranta and Pajunen-Muhonen, 2008) There are several definitions for maverick buying (Karjalainen et al., 2009) in the extant literature and in this thesis the one provided by Angeles and Nath (2007) is used. They define maverick buying as ‘purchase of goods or services without using the firm’s formally defined processes and authorized vendors’.

When an organization suffers from maverick buying it is very difficult to get answers to following questions which are rather simple but still very important when it comes to developing purchasing (Iloranta and Pajunen-Muhonen, 2008):

- What are we buying, from where, from whom, and how much?
- At what price and price level we are buying?
- How do we outline the money used for purchases?
- How do we follow realization of the purchases and for whom do we report?
- Where from do we get the information regarding purchases?
- Why do we buy some products from a specific supplier and some others from another?

Maverick buying can bring several challenges to an organization. Iloranta and Pajunen-Muhonen (2008) have dealt with the challenges more from general perspective whereas Karjalainen et al. (2009) have covered the challenges related mainly to off-contract purchases. Iloranta and Pajunen-Muhonen claim that maverick buying causes usually significant amount of unnecessary overlapping work and inefficiencies. It is also typical that the receiving of products is not followed at all which makes it more difficult to follow deviating deliveries. Another significant problem is that no one has an overall picture of what is being purchased to the company and how much money is spent for it. Finally, maverick buying can lead to problems in the later phases of the life cycle of the purchase (e.g. warranty, support services, maintenance and spare parts).

Nowadays many organizations move from decentralized to centralized purchasing and make corporate-wide framework agreements with their suppliers. The company then expects every unit to buy goods and services under created framework agreements. Those agreements can have several advantages, including reduced number of suppliers, increased purchasing leverage, and reduced purchasing costs. However, none of these advantages is achieved without high contract compliance. (Karjalainen et al., 2009)

According to Karjalainen et al. (2009) off-contract purchasing leads to higher prices as the corporate contracts often contain volume discounts from preferred suppliers. Usually the total cost of the off-contract purchase is higher even if the purchase price is lower due to transaction costs, including ordering, invoicing and payment. There will be also additional costs for the company as they need to manage more suppliers if the preferred suppliers are not used. Sometimes the framework agreement includes a promised volume which may not be met due to

off-contract purchasing. Off-contract purchasing also increases risks as contract terms and conditions are not always properly reviewed.

It is also worthwhile to note that maverick buying can exist in different forms and each form has distinct reasons behind them. Maverick buying can be unintentional, forced, casual, well-intentioned or ill-intentioned. The reasons behind different type of maverick buying include lack of awareness, lack of ability and lack of motivation of the employees. Personal experiences or organizational factors are causing the reasons. The different forms and reasons behind them are comprised in the following table (Table 8). (Karjalainen et al., 2009)

Table 8 Different forms of Maverick Buying (adapted from Karjalainen et al., 2009)

Form	Description	Reasons
Unintentional maverick buying	Employees do not know there is a frame agreement in place	Unfamiliarity with corporate purchasing policies Lack of internal information provision about negotiated contracts
Forced maverick buying	Employees are aware of the preferred process, but encounter barriers to comply with that preferred process	Practical reasons preventing compliance (e.g. item not contracted yet)
Casual maverick buying	Employees are aware of the preferred process, but continue to do as they please	Employee not feeling a need to change (e.g. lack of guidance, lack of incentives, not seeing TCO effect)
Well-intentioned maverick buying	Employees think they are doing the right thing for the company by ignoring the preferred process	Perceived superiority of an alternative offer Perceived superiority of own purchasing skills
Ill-intentioned maverick buying	Employees are aware of preferred process and able to use it, but actively oppose this new process	Opportunism (i.e. self-interest seeking with guile) Resistance to change (e.g. feeling of reduced personal power)

2.2.5 Managing indirect purchasing

According to Iloranta and Pajunen-Muhonen (2008) an organization can improve both profitability and quality of its operations by moving from maverick buying to systematically managed and controlled purchasing. If the professional purchasing perspective and expertise is extended to indirect purchasing, it is possible to achieve significant cost savings in operational costs through centralizing in prices and total costs. Even though there are no best practices that could be applied in every situation and organization, there are some good methods for improving the indirect purchasing. Those methods are introduced in this section.

A purchasing strategy is the foundation of all the development also in purchasing of indirect goods and services. Formulation of the purchasing strategy is the same with both direct and indirect purchases. The most important matters are to pursue for utilizing the whole volume of the company, to reduce and harmonize the product and service variety being purchased, and to systematically search for product group specific savings in both purchasing prices and purchasing processes. (Iloranta and Pajunen-Muhonen, 2008)

One of the central targets when developing indirect purchasing is to increase the efficiency in managing both processes and costs. The biggest change required by the company or organization is usually to define new managing and controlling model for purchasing indirect goods and services. The starting point is often that the indirect goods and services are bought completely in a decentralized manner in business units, departments and groups. The purchasing budgets are owned by the business units and it is very important to ensure that the management of business and support functions is committed for developing a common management model and purchasing strategy. (Iloranta and Pajunen-Muhonen, 2008)

The organization can achieve both volume advantage to purchases and better prerequisites for managing supplier markets by centralizing the purchases of indirect goods and services. Realizing those targets usually requires eliminating the number of suppliers. When the organization centralizes its purchases to fewer suppliers, it is able to gain different economies of scale and conditions for exploiting the supplier collaboration increases. (Iloranta and Pajunen-Muhonen, 2008)

Developing the purchasing of indirect goods and services is not a simple matter and achieving a successful result requires strong knowledge of the needs and operational preconditions. There are significant differences between cost efficiency and satisfying the needs of the customer, and

the one responsible for the development has to balance between those. The distinct objectives of the purchasing function and internal customer are presented in the following table (Table 9). (Iloranta and Pajunen-Muhonen, 2008)

Table 9 Typical objectives of an internal customer and purchasing unit (adapted from Iloranta and Pajunen-Muhonen, 2008)

Objectives of the internal customer	Objectives of the purchasing unit
Desired product or service	Low total costs
Desired supplier	Objective supplier selection
Extensive product and service variety	Sufficient product and service variety
Filling of own requirements	Standardizing the requirements, defining
Flexibility of the purchasing unit's service	Keeping the costs down
Ease of use of the electronic system	Effective processes

Resolving the conflict of targets can be assisted by taking it into account in the structure of the purchasing organization and by creating cross-functional teams (Iloranta and Pajunen-Muhonen, 2008).

The final method mentioned by Iloranta and Pajunen-Muhonen (2008) is the implementation of an electronic procurement system. It makes managing of the indirect purchasing essentially easier and more effective. The job description of the purchasing unit changes from carrying out operational tasks into more strategical direction when taking electronic procurement system into use. The electronic procurement system needs to contain at least a list of products and services which the company has decided to use. The information and prices of those products and services need to be found from the list.

2.3 Developing purchasing

There are not much extant literature about conducting a spend analysis which may be because surprisingly low amount of companies have yet implemented it (Pandit and Marmanis, 2008). However, spend analysis is the starting point for developing purchasing in a company (Iloranta and Pajunen-Muhonen, 2008) and every cost savings project in purchasing begins with it (van Weele, 2010).

After discussing about the spend analysis some typical cost-savings opportunities which can be identified with thorough spend analysis are represented. The section then continues with typical challenges in the purchasing process. The final subject in this section is involving a purchasing department in indirect purchasing.

2.3.1 Spend analysis

Spend analysis is a process which helps companies to analyze their historical purchasing data systematically. It can also be thought as the point where the strategic sourcing begins as it creates prerequisites for managing a particular spend. It makes spend and compliance rate transparent and helps to control them. (Pandit and Marmanis, 2008)

The main objective of spend analysis is to confirm the real spend in different categories (Pandit and Marmanis, 2008) or in other words, to find out where the company is spending its money (Iloranta and Pajunen-Muhonen, 2008). In addition it aims to recognize the strategic sourcing opportunities, and to identify expense reduction possibilities which could be achieved due to increased compliance rate (Pandit and Marmanis, 2008).

Aggregating the demand and rationalizing suppliers are examples of strategic sourcing opportunities. Maverick spend, vendor rebates, budget variance and low contract compliance rate are typical issues that can be discovered through rigorous spend analysis. (Pandit and Marmanis, 2008)

According to Pandit and Marmanis (2008) the main idea behind spend analysis is to identify savings opportunities. One might find that the company is spending high amount of money with non-preferred suppliers which indicates spend leakage. This is simply because the prices and terms are usually worse with the non-preferred than preferred suppliers. In addition one might find that the company is sourcing same goods and services from several different suppliers. By centralizing those purchases for fewer suppliers the company may be able to achieve better prices and terms. Monczka et al. (2011) argue that companies can achieve major improvements by managing higher proportion of their spend, including reduced costs, noncompliant purchases and supply base, and electronically enabled suppliers.

Spend analysis can be done in many different ways and there is not just one right way to do it. There are some great practices that one should be aware of when starting the spend analysis. (Payne and Dorn, 2012) Monczka et al. (2011) offers a simple process (Figure 2) for conducting spend analysis which is suitable in most situations. The starting point in their process is that the company has the spend data available and the data is sufficiently precise.

The first step is to sort spend by categories. The categories depend on the company but there can be found categories such as advertising, telecommunications, and energy, for instance. When spend is sorted by the categories they can easily be arranged by the total spend which

immediately shows in which category the company is spending most of its money. Next, one can select the 10 largest categories and create a chart of them. Monczka et al. (2011) have used Pareto chart to do that. The chosen categories represent the highest spend and, therefore, there are opportunities for sourcing analysis which can lead for cost savings and price reductions.

After identifying the biggest spend categories one can investigate which are the biggest categories by supplier number and arrange the categories based on the results. Same kind of chart can now be drawn as earlier. High number of suppliers may indicate that some advantages could be achieved through reduced supply base. (Monczka et al., 2011)

Next step is to calculate the average spend per supplier for every category and to sort the categories based on the results. This time one should find out which categories have the lowest spend per supplier. If the value is low, it may indicate that the company is using too many suppliers in that category. One may find that the companies in this top list are different than in those shown in the earlier lists. Now one is ready for finding the savings opportunities and deciding the first actions to be taken. (Monczka et al., 2011)

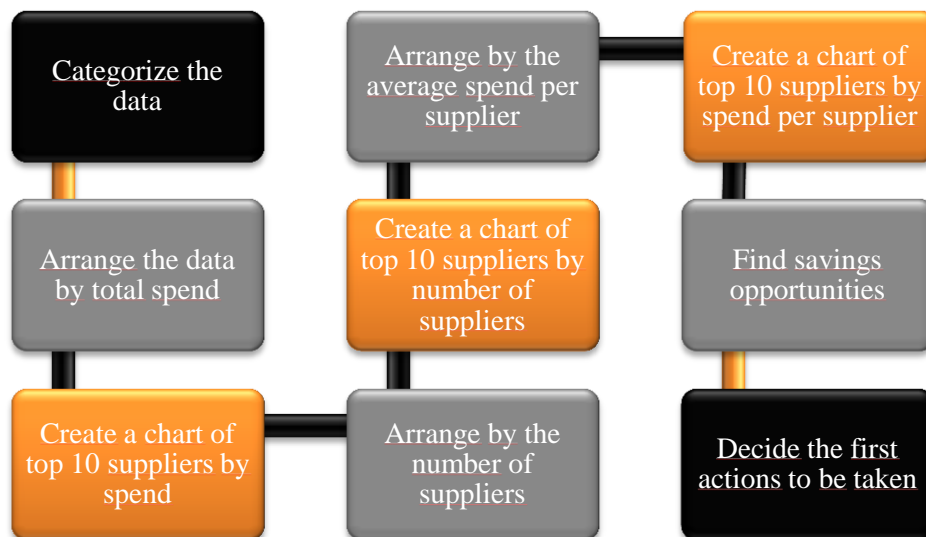


Figure 2 Simple process for conducting spend analysis (Monczka et al., 2011)

Payne and Dorn (2012) describe a process for conducting spend analysis in a situation where the company does not have any spend analysis tools for cleansing and categorizing the data. This process is out of the scope of this study as the case company uses a spend analysis tool for these purposes and, therefore, it will not be described here.

2.3.2 Cost-savings opportunities

Cost-savings opportunities through strategic sourcing have been discussed widely in the extant literature (e.g. Ashenbaum, 2006; Nollet et al., 2008; Pandit and Marmanis, 2008; Rudzki et al., 2005; Rudzki and Trent, 2011; Schiele, 2007; Schiele et al., 2011). Pandit and Marmanis (2008) have identified two different types of opportunities: aggregate spend-level opportunities and transaction-level opportunities. In addition they provide a framework for prioritizing different opportunities. It has also been investigated how the maturity of purchasing in an organization is effecting the savings potential (Schiele, 2007) and how large opportunity international sourcing is compared to other sourcing levers (Schiele et al., 2011). Moreover, the challenges regarding the implementation of the opportunities have been studied (e.g. Ashenbaum, 2006; Nollet et al., 2008).

The cost-savings opportunities can be even higher for indirect goods and services than direct (Rudzki and Trent, 2011). Therefore, companies can achieve major cost savings by managing indirect spend categories properly. Purchasing attention has focused on direct spend categories for years and therefore the indirect spend categories are often managed poorly leading for great savings opportunities. In addition the indirect spend management is often fragmented and indirect categories might be handled by non-purchasing personnel who are not using a strategic sourcing process. It is also typical that indirect spend suppliers have higher profitability than direct spend suppliers leading to greater pricing flexibility. (Rudzki and Trent, 2011)

Cost reduction and cost avoidance

A popular way of categorizing cost-savings opportunities in purchasing literature seems to be dividing opportunities into *hard* and *soft* savings (e.g. Ashenbaum, 2006; Nollet et al., 2008). Nollet et al. (2008) used definitions which describe *hard savings* as those monetary savings which have a direct impact to the bottom line and *soft savings* as those savings which might be converted into monetary savings in the future.

Ashenbaum (2006) described the concepts in more detail. First of all, hard savings can be named as *cost savings* and generally they are tangible bottom line reductions that lead to saving money which can further be used into the business or removed from budgets. Those savings need to be able to be measured against spend of earlier period. Soft savings or *cost avoidance* are more difficult to define or measure. Cost avoidance cannot be found directly from profit and lost statement and it is not actually tangible budget saving which could be invested again or taken away from the budget. A simple example of cost avoidance is, for instance, when supplier is

going to increase its price but that can be somehow resisted or delayed. In this situation the saved money cannot be seen by comparing the new spend with the earlier one. (Ashenbaum, 2006)

Typical opportunities

Pandit and Marmanis (2008) are looking for opportunities from the perspective of spend analysis and have described opportunities for savings that can be identified by most companies. Opportunities can be divided into *spend-level opportunities* and *transaction-level opportunities*. Spend-level opportunities can be identified easier as many spend analysis applications include aggregate spend reports. Transaction-level opportunities are more difficult to identify as specialized reports are needed to uncover them. Main opportunities are summarized in the figure below (Figure 3). (Pandit and Marmanis, 2008)

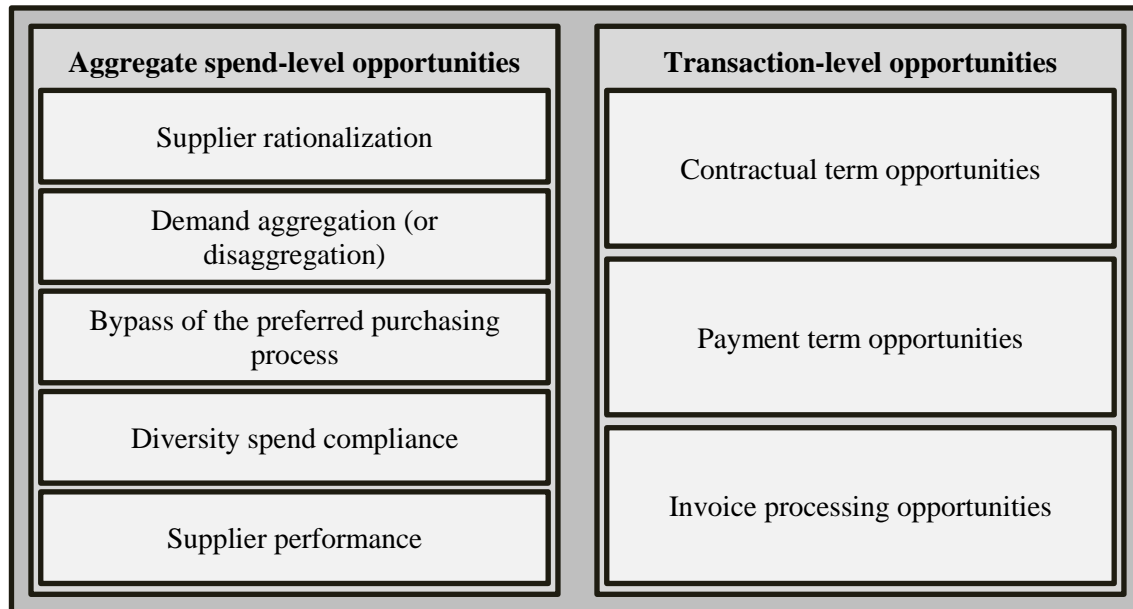


Figure 3 Typical opportunities for savings (adapted from Pandit and Marmanis, 2008)

Spend-level opportunities are those that can be identified without looking individual transactions. Those opportunities are recognized by observing the aggregate amounts by category, supplier, cost center etc. *Supplier rationalization* is the first and perhaps the easiest to gain opportunity. In many companies spend has become very fragmented due to organic growth or mergers and acquisitions. This can lead for buying same goods or services by different divisions from several suppliers. Each division might even have their own price and contractual terms and therefore the company is losing the advantage of price and volume rebates. (Pandit and Marmanis, 2008)

The second opportunity is *demand aggregation* which means that the company can negotiate lower costs and better terms with its suppliers by increasing volume through demand consolidation. One should be aware that in some situations the cost decreases with volume to certain point but increases at extremely high volumes (i.e. disaggregation). One reason for spend leakage is that all of the purchasing is not done through preferred purchasing process. This type of behavior can be identified by looking for non-PO spend and off-contract spend of different operating units. Purchasing from non-preferred supplier or without normal approvals can result in higher prices and less favorable terms. (Pandit and Marmanis, 2008)

Companies can have different corporate policies, for example, one might have requirement for using 10% of spend through minority- and women-owned business enterprises. This can and should be monitored so that every category uses enough but not unnecessarily too much such enterprises. *Supplier performance* is the last group of aggregate spend-level opportunities. Some of the issues that should be looked for are spend with poorly performing suppliers, approved versus non-approved spend and spend by payment type. The company can achieve cost-savings by using better performing suppliers, increasing approved spend and changing payment type to the most cost-optimal mechanism. Electronic funds transfer is more cost-optimal mechanism than check or credit card. (Pandit and Marmanis, 2008)

The biggest spend leakage reason is contract violations. Unfortunately it is also perhaps the most difficult to attain. Unrealized discounts and rebates, quantity violations and delivery date violations are just few examples of *contractual term opportunities*. In order to recognize these opportunities one need to compare the contract line item detail with the actual transaction details. *Payment term opportunities* can be significant as well. By negotiating better payment terms (i.e. delaying payments) companies can achieve cost savings through annual interest gained from the delayed time period. (Pandit and Marmanis, 2008)

Many companies often ignore the payment part of the procure-to-pay (P2P) process. However, there can be found large cost-savings opportunities. The processing costs of a payment can be surprisingly large and by consolidating individual payments the processing costs can be reduced. Another opportunity here is frequent charges and credits which can occur due to various reasons (e.g. received goods have quality problems and need to be returned). By reducing these charges and credits the company can gain savings. Moreover, companies have typically PO approval limit which is the amount below which an approval is not needed. These limits can however be

circumvented by cutting the order into several POs which again increases the processing costs. (Pandit and Marmanis, 2008)

Realistic expectations of cost-savings

Overall, it is not unprecedented for purchasing department to account reduce of 8 to 10% of total spend by collaborating with its internal client departments. Usually that kind of sustainable improvement can be achieved in five to seven years in several phases (i.e. waves which will be discussed later). The potential for cost reductions vary greatly among different categories of spend. In addition the potential can be distinct within the same category in different industries and companies. For example, the creativity of the purchasing department and dynamics of individual supply markets can affect the results. (Rudzki et al., 2005)

Rudzki et al. (2005) found that if a company is willing to invest in advanced purchasing it can achieve significant cost reductions in different categories (see Figure 4). One should note that the savings opportunities below assume that the company has not yet involved strategic sourcing.

Category description	Savings opportunity
Raw materials	2 to 5%
Packaging	10 to 20%
Indirect materials and services	10 to 20%
Information technology	15 to 30%
Professional services (e.g. consulting)	8 to 15%
Logistics (rail, truck, barge, ocean, air)	7 to 15%
Media/marketing/promotional items	10 to 20%
Other indirects (nonproduction costs)	5 to 15%
Capital projects	7 to 15%

Figure 4 Cost reduction opportunities as percent of spend (adapted from Rudzki et al., 2005)

Schiele et al. (2011) investigated what is the role of international sourcing among other sourcing levers. Other studied levers were, for instance, price evaluation, pooling of demand, process optimization, supplier integration and cross-commodity levers. The most important finding was that there were no single sourcing lever significantly better than others but instead companies should use balanced sourcing approach to achieve the maximum benefits.

Another matter that influences the savings potential is the purchasing maturity of the firm. Schiele (2007) found that the company is more likely to identify larger savings opportunities if its maturity is higher. It should be also noted that there seems to be a minimum maturity point below which the company cannot gain any advantages by introducing best practices. (Schiele, 2007) Purchasing maturity consist of various factors, including professionalism of the purchasing function, organizational status of the purchasing department, utilization of purchasing information systems, quality of the personnel involved in purchasing, and level of buyer-supplier collaboration (Rozemeijer et al., 2003).

Prioritizing opportunities

As mentioned before significant sustainable improvements to total spend can be achieved only within sufficiently long period of time (Rudzki et al., 2005) and therefore one should decide which categories have the largest savings potential and take actions in those categories first. One approach for making the prioritizing decision is to evaluate each sourcing category by the size of opportunity and implementation difficulty (Pandit and Marmanis, 2008; Rudzki et al., 2005; van Weele, 2010). There can be found various frameworks in the extant literature and one of them is presented below (Figure 5) (see also Rudzki et al., 2005).

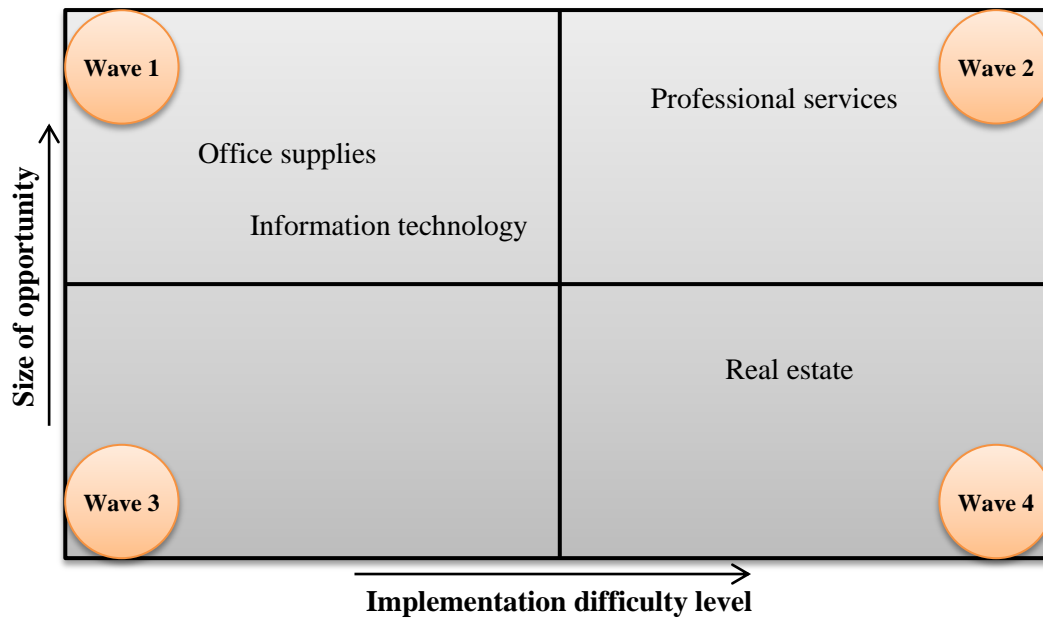


Figure 5 Prioritizing framework example (adapted from Pandit and Marmanis, 2008)

The wave 1 should consist of sourcing categories which have large savings opportunity and are easy to implement. There can be several categories in one wave and the sufficient number depends on the resources of the company. There are no general answers in which categories belong to which wave but instead it can vary greatly between companies. Academics recommend that companies should first select few sourcing categories to make initial and visible successes in order to increase executive commitment. Thus, moving to more difficult categories later should become easier. (Rudzki et al., 2005)

2.3.3 Typical pitfalls in the purchasing process

The very first pitfall often occurs already in the specification phase. It is very important to define the specifications in general instead of directing them towards one specific supplier or brand. If the supplier guesses that it will be chosen, the bargaining power of the buyer is basically zero. Moreover, if too much emphasis is put on the technical expertise of the supplier, other important requirements of the company get neglected. (van Weele, 2010)

One of the most critical activities in the purchasing process is the selection of the supplier. The selection should be done with great care and the references of the supplier should be checked, including bank references. Otherwise the risk exposure related to the performance of the supplier grows unreasonable high. The potential risks include unexpected bankruptcy of the supplier, poor quality and neglecting the warranty agreements, just to mention few. (van Weele, 2010)

Sometimes people tend to choose the supplier based on personal relationship either intentionally or unintentionally. Personal relationships with suppliers often cause long relationships between organizations even when it is not rational. This may lead to thinking that the supplier is more competitive than it really is. (van Weele, 2010)

One cannot emphasize enough the importance of good contractual arrangements. However, too often the situation is that purchases are made without having any kind of contract in place. If there is a contract in place, it is too often written using only general terms, a legal check might be missing and the description of what is being purchased is inadequate or the requirements for the supplier are not documented. Moreover, the risk exposure is always higher if the contract template comes from the supplier as it usually contains legal terms and conditions that are beneficial for the supplier. (van Weele, 2010)

When making the buying decision people tend to put too much emphasis on price instead of total cost of ownership (TCO). This may lead to higher total costs over the lifetime of the product or service as the costs of spare parts and maintenance may be significantly higher than in other options. Therefore, using as accurate TCO model as possible helps the company to achieve remarkable cost savings. (van Weele, 2010)

An organization should put effort on its administrative processes as well. Invoices should always be matched against the purchase order and delivery document. In addition there should be a policy for placing the purchase order always before the delivery instead of requesting it from the purchasing department after the product or service have already been received. With systematic and professional administrative processes the company can achieve huge savings. (van Weele, 2010)

The final pitfalls according to van Weele (2010) appear in the delivery stage. The product or service may be delivered too late or incomplete, the quality may not be as agreed, packaging may be unsound, or information labels cannot be read. Usually these problems occur because of mistakes made earlier in the process. For instance, specifications may be inadequate or the supplier may have been chosen carelessly. If the systematic evaluation of the suppliers is neglected, it can also lead to using of poorly performing suppliers. (van Weele, 2010)

2.3.4 Involving the Purchasing Department in indirect purchasing

According to Johnson et al. (2011) most of the value improvement (i.e. about 70 percent) can be achieved already in the need identification and specification stages of the purchasing process.

Therefore it is highly recommended that the purchasing department is involved in decision making from the early beginning.

Potential advantages for involving the purchasing department

A previous study (Bales and Fearon, 1993) shows that role of a purchasing department is much smaller with indirect purchasing compared to purchasing of direct goods and services. In many cases the purchasing department is not involved at all in the purchasing of indirect goods and services. The foregoing study states that services (e.g. advertising) are bought with no input from the purchasing department in 39% of the companies and the same number for the purchase of utilities is even higher, 55%.

There are several advantages that involving the purchasing department in the purchasing of indirect goods and services can bring to the company. Bals et al. (2009) primarily studied the barriers of involving the purchasing department in the procurement of marketing services but there also emerged few advantages in their interviews. The purchasing department helped internal customers in securing supply, achieving cost targets, and maintaining or improving quality. Tate et al.'s (2010) study adds that the purchasing department can contribute to the purchasing of marketing services by increasing the consistency of goals, adding value, improving commercial effectiveness and enhancing cost efficiency.

Ellram et al. (2007) studied managing the purchase of services and how it contributes to organizational performance. Increasing professionalism and support in purchasing services can bring number of benefits for the company. The potential benefits include increasing value the organization receives through purchasing services, reducing overbuying while ensuring that actual needs are met, and reducing the risk exposure of the company. In addition the organization can achieve substantial cost reductions through reducing over-billing, reducing the supply base, and leveraging purchases across businesses. Consequently, the increased leverage can lead to better customer service and improved collaboration with the suppliers.

According to Fearon and Bales (1995) it does not matter who is doing the actual purchasing of indirect goods and services as long as the person is adequately trained, uses a logical purchasing process and the effectiveness of purchasing is continually measured. They argue that making the procurement process more effective can bring two types of leverage. Financial leverage is achieved through larger volumes which usually lead to lower costs. Expertise/experience

leverage improves the task of reengineering any process by bringing more ideas, innovation and imagination.

Environment for successful involvement of the purchasing department

To achieve the number of potential benefits mentioned above, an organization needs to create the right kind of environment due to several barriers. Internal departments often resist the involvement of the purchasing department into their purchasing process because people wish to act independently, operate with their own preferred suppliers and negotiate own contracts (Cox et al., 2005).

Bals et al. (2009) identified four barriers for involving the purchasing department. First barrier is lack of motivation which may occur due to cultural differences between functions. Lack of motivation can lead to functions not willing to cooperate. Lack of opportunity basically means that functions do not have enough opportunities to interact. One reason is that, for instance, purchasing and marketing departments are rarely located in the same place. Third barrier is the lack of awareness and it occurs when other functions do not know that they could receive support from the purchasing department. Moreover, there might emerge a situation where either side is missing sufficient capabilities. This type of barrier is referred as lack of skills.

A right kind of environment enhances succeeding in involving the purchasing department in indirect purchasing. The most important factor in creating the environment is the support of the top management. Top management needs to make sure that internal departments are willing to receive the help. In addition they should guide middle management about the objectives, for instance, improved profits, improved product position in the marketplace, higher quality or complete reengineering of the process. (Fearon and Bales, 1995)

According to Fearon and Bales (1995) there are also other factors which are part of the environment. The purchasing department needs to have enough credibility within the organization, enough knowledge and resources for handling additional responsibilities, and to be willing to learn about different industries. Moreover, internal customers need to be willing to receive the support from the purchasing department to improve their process. Both leverages, including financial leverage and expertise/experience leverage should be exploited to achieve the best result.

Implementation process for involving the purchasing department

Fearon and Bales (1995) studied 16 companies whom have involved the purchasing department in indirect purchasing. In all of the studied companies the purchasing department provided three types of services, including establishing contract terms, conducting negotiations and participating in contracting. In 94% of the companies the purchasing department also participated in qualifying suppliers. Those were also perceived as the most important areas of expertise of the purchasing department.

They also listed the steps used in new procurement process of indirect goods and services (see Table 10). The culture and circumstances influence on the use and importance of each step. Organizations need to determine whether to include all the steps in every process. The first and most important step is to discuss about the needs with the internal customer and it was conducted in every company. Other steps that were exploited in every company were discussing about past practices and process with internal customer or person handling the purchase, obtaining supplier participation in determining any needed changes, analyzing and identifying the potential benefits of the new process, checking supplier's quality, service, financial condition, etc., developing formal negotiation criteria, and resolving any remaining issues with internal customer. (Fearon and Bales, 1995)

Table 10 Steps of new procurement process for indirect purchasing (adapted from Fearon and Bales, 1995)

Steps of new procurement process for obtaining indirect goods and services

1. Discuss needs with internal customer
2. Discuss past practices/process with internal customer and person handling purchase
3. Establish a cross-functional team for developing the process
4. Review industry practices/processes with past, current, and potential suppliers
5. Prepare an acquisition work process that meets the need of the internal customer and the supplier(s)
6. Prepare specification in a format that the supplier understands
7. Obtain supplier participation in determining any needed changes
8. Establish needed performance metrics with internal customer
9. Analyze and identify potential dollar savings and/or other benefits that will result from this new process
10. With internal customer, establish contract/agreement goals:
 - a. length of contract/agreement

- b. acceptable price range (min/max)
 - c. acceptable number of suppliers
 - d. how to buy (bid/negotiate/other)
 - e. required terms/conditions
11. Develop list of potential suppliers/contractors
 12. Check supplier(s) quality, service, financial condition, etc.
 13. Develop formal bid/negotiation criteria
 14. Purchasing department issues the request for bids/quotes/negotiations and furnishes specifications
 15. Purchasing and internal customer review quotes
 16. Purchasing issues contract/agreement
 17. Establish review process to monitor ongoing supplier performance
 18. Resolve any remaining issues with internal customer
 19. Remove purchasing department from day-to-day involvement
 20. Establish measurement techniques to evaluate the "hard" and "soft" savings and other improvements
-

2.4 Framework for identifying potential purchasing development areas

Traditionally purchasing is mainly understood as an operational task. Therefore, it was important to show purchasing process in its broadest scope to show the whole potential of purchasing. In addition, purchasing has been evolving in the last decades and will most probably keep doing so. Many companies have not recognized the opportunities that professional purchasing can bring to the company and it has opened wide development opportunities.

The empirical part of this study is limited to indirect purchasing which is much less discussed subject in the extant literature. After learning the basic things about purchasing and making an understanding about its importance to a company, peculiarities of indirect purchasing were gone through. Understanding which of the purchases are indirect, what are the main differences compared to direct purchases and other typical characteristics help in figuring out the potential opportunities for development.

The ultimate objective of this literature review was to figure out what kind of development targets a company should be looking for when it wants to make the most of its purchasing. Additional objective was to find out who could be driving the development project within the company.

The academic literature very rarely discusses about the best practices of purchasing. It is also questionable whether best practices of one situation are best practices in another situation. Therefore, instead of identifying best practices, this literature review aimed to discover typical flaws regarding purchasing. There are not many studies about the typical flaws in indirect purchasing specifically and therefore potential development targets were searched for from studies concentrating on direct purchases as well.

There was found some typical flaws which are related to managing purchasing in an organization and some typical mistakes which may occur during the purchasing process. A framework (Table 11) was drawn based on the extant literature and it creates a foundation for identifying development targets in the empirical part of this study.

Table 11 Framework for identifying the typical flaws in purchasing

Purchasing management
Lack of purchasing strategy
Bypass of the preferred purchasing process
Unsuitable or non-existing model for managing and controlling purchasing
Scattered and inadequate reporting
Bargaining power of the organization is not exploited
Mutual knowledge of the organization is not shared efficiently
Poor administrative processes
Purchasing process
Specification phase
Specifications are directed to a specific supplier or brand
Requirements and specifications are not defined internally
Deciding the source of supply
Inadequate supplier selection
Too much emphasis on price
All opportunities of the supplier markets are not pursued
Supplier selection based on personal relationships
Negotiating and making a contract
Indifferent preparation to negotiations
Lack of good contractual arrangements
Ordering
Inadequate invoice processing
Delivery problems
Post-purchase activities
Insufficient control of supplier network and suppliers
Lack of evaluating and managing supplier performance

3 Methods and material

In this chapter the research design (Figure 6) is first described. Next the research strategy is revealed with the reasoning behind all decisions. Moreover, the methods for collecting and analyzing data are discussed in more detail.

The literature review creates a foundation for the whole study. The empirical part itself encompasses three different parts, including a spend analysis, qualitative interviews and a quantitative survey. The quantitative survey is created based on both the literature review and findings from the qualitative interviews. First all of the parts of the empirical study are analyzed independently but in the end they are combined together and analyzed to develop recommendations for the case company.

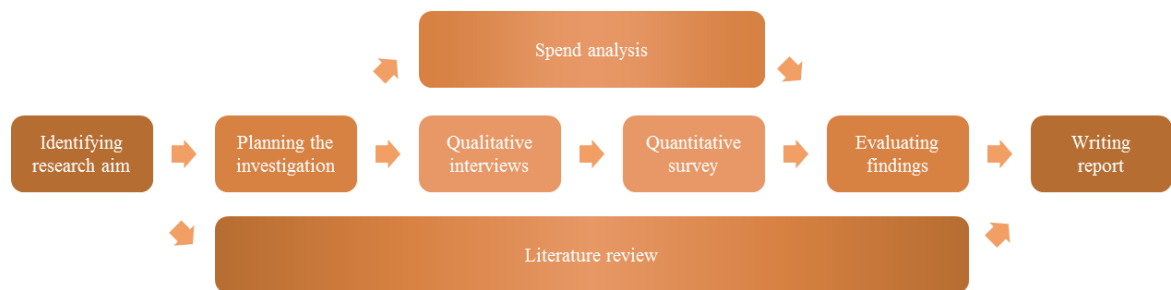


Figure 6 Research design

3.1 Research strategy: Case study

A research strategy which takes place in a single setting and tries to understand the dynamics that are present is called a case study (Eisenhardt, 1989). The case study is also an empirical inquiry conducted in a real-life context investigating a contemporary phenomenon. The first decision to make when designing case studies is to choose between single- and multiple-case designs which both have their own rationales. This Master's thesis is a single case study due to its focus on a specific organization. More specifically it is an embedded case study as in addition for investigating the whole organization it studies individual functions (i.e. subunits of analysis). The subunits can enhance the insights into the single case by adding more opportunities for extensive analysis. (Yin, 2009)

One of the typical features for a case study is its reliance on multiple sources of evidence (Yin, 2009). Eisenhardt (1989) mentioned that the typical data collection methods include, for instance, archives, interviews, observations, and questionnaires. This thesis combines at least

three of those, including archives, interviews and a questionnaire (Figure 7). According to Yin (2009) a good case study uses as many sources of evidence as possible.

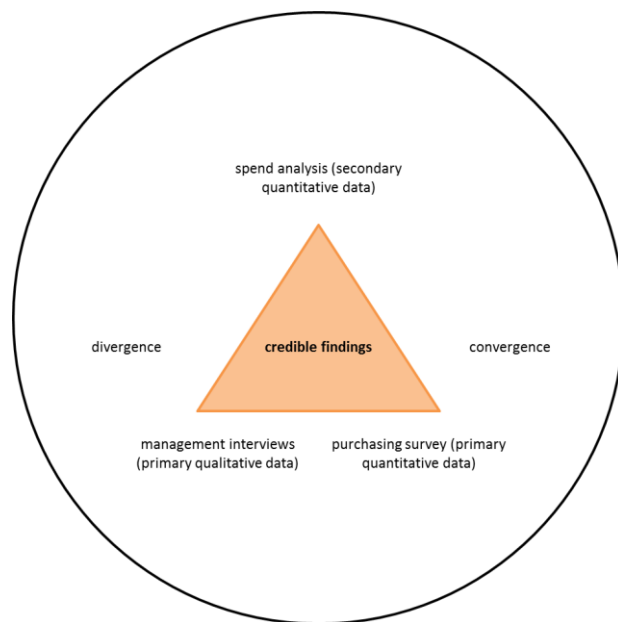


Figure 7 Using multiple sources of evidence (adapted from Farquhar, 2012)

Interviews are often used to build theory whereas questionnaire surveys are more often used to test theory (Snow and Thomas, 1994). The embedded case design makes it possible to use both qualitative and quantitative data, and it is common that this type of case studies do not use only qualitative analysis (Scholz and Tietje, 2002).

There is not much knowledge about how indirect purchases are currently handled in the case company and therefore, qualitative interviews are particularly suitable for enhancing our understanding (Guest et al., 2013). The quantitative survey completes the methodical triangulation in this research and it enhances the reliability, validity and generalizability of the findings of qualitative interviews. Moreover, the quantitative survey makes it possible to investigate different departments independently (Yin, 2009)

Qualitative methods

There is no standard definition for a qualitative research nor is there one correct way to conduct one. Compared to quantitative research methods, qualitative methods are more inductive and flexible which offers unique advantages in some situations. For instance, it is possible to get more detailed information about experiences, behaviors, and beliefs of people. (Guest et al., 2013)

There are three types of case study interviews, including in-depth interview, focused interview and survey. This thesis conducts both focused interviews and a survey. In focused interviews the participants are interviewed for a relatively short period of time (e.g. one hour). Typically these types of interviews remain open-ended and have similarities with formal conversations. (Yin, 2009) In focused interviews the same themes and subject matters are covered but the design and order of questions may vary (Ruusuvuori and Tiittula, 2005).

Quantitative methods

Quantitative research usually relies either on measuring variables or counting of events or objects which means that the data are numbers when the analysis begins. The purpose of the quantitative research is to test hypotheses or theories. (Wellington and Szczerbinski, 2007) Quantitative research methods typically allow improved operational definitions, objectivity, causality, and replicability (Bryman, 1984).

Quantitative survey was conducted in order to complete the methodological triangulation. Briefly triangulation can be defined as using multiple methods, and it has different basic types, including data, investigator, theory and methodological triangulation (Denzin, 2009).

3.2 Data collection

The case company has divided its indirect purchases into 11 different categories (see e.g. Figure 9). Three different types of data were collected to conduct this study. Data collection regarding the spend analysis is discussed in the beginning of the empirical part. Data collection regarding semi-structured interviews and survey questionnaire are dealt with in this section.

Semi-structured interviews

The qualitative data was collected by interviewing 13 managers and directors of the case company. Managers and directors were chosen because they are assumed to know most about the indirect purchases performed in their own departments.

Theoretical sampling was used as a method of data collection. According to Corbin and Strauss (2008) sampling is made open and flexible with this responsive approach. In this approach researchers choose places, people, and situations based on where they believe to find information about the concepts they are willing to learn more about.

The analysis was begun right after the first interview instead of collecting the whole data set before analyzing it. Moreover, the following basic criteria were used in selecting the

participants, including access to the person, different departments, and awareness of indirect purchasing in the company. The comprehensive list of the interviewees can be found in Appendix 1.

The interview structure was divided into three parts, including the background of the interviewee, practices in different stages of the purchasing process, and miscellaneous questions related to, for instance, challenges regarding purchasing and potential consequences for involving the sourcing department. The comprehensive question list can be found in Appendix 2. The interviews lasted on average 50 minutes and they were conducted between May and June in 2015.

It is also important to pay attention to the way how the interviews are conducted. First of all, the interviewer has to aim at neutrality (Ruusuvuori and Tiittula, 2005). The interviewer needs to minimize his own involvement, including being independent, not indicating own opinions, not surrender into debate, and not to marvel anything (Hirsjärvi and Hurme, 2001). These instructions were followed through all of the interviews.

Survey questionnaire

A self-administrative questionnaire was conducted in order to broaden the scope of the study. The questionnaire was sent randomly to 258 employees of the case company. In total 70 responses were returned and 49 of them were usable which represents a response rate of 19%. The main criterion for usability was that the person had been involved in indirect purchasing within the last 12 months. The titles and responsibilities of the respondents vary greatly and all possible departments are covered (Table 12). 61,22% of the respondents are located in Finland and 38,78% in other countries mainly in Europe (Table 13).

Table 12 Departments of the respondents

Department	Number	Percent
Marketing	3	6,12%
Finance	7	14,29%
Human Resources	9	18,37%
IT	4	8,16%
Product development / R&D	7	14,29%
Production	9	18,37%
Sales	7	14,29%
Facilities	3	6,12%
<i>Grand total</i>	<i>49</i>	<i>100,00%</i>

Table 13 Locations of the respondents

Location	Number	Percent
China	1	2,04%
Finland	30	61,22%
France	3	6,12%
Germany	4	8,16%
Norway	3	6,12%
Poland	2	4,08%
Russia	1	2,04%
Sweden	1	2,04%
The Netherlands	2	4,08%
United Kingdom	1	2,04%
Czech Republic	1	2,04%
<i>Grand total</i>	<i>49</i>	<i>100,00%</i>

The questionnaire was developed based on the framework created in the literature review and the findings from management interviews. The main part of the questionnaire includes 22 different arguments related to the process of indirect purchasing and the respondents were instructed to rate each argument on a 5-point Likert scale from “1” = strongly disagree to “5” = strongly agree. In addition the respondents were asked about the challenges regarding purchasing, and the advantages and feelings of involving the sourcing department.

Before sending the actual questionnaire two cognitive interviews were performed to test and improve the questions. In addition the questionnaire was tested with several participants. The questionnaire structure was modified based on the feedback, and the complete list of final questions can be found in Appendix 3.

In this type of surveys the non-response bias is always a threat. According to Armstrong and Overton (1977) one way to assess the non-response bias is to compare responses between early respondents and late respondents. To test the non-response bias 10 survey items were selected randomly and univariate t-tests were performed. Based on the univariate t-tests there are no statistically significant differences between the early and late respondents (P values ranged from 0.328 to 0.833).

3.3 Data analysis

Analyzing the data can be divided into four stages which are performed mainly in parallel. One of the stages is the spend analysis and it is conducted mostly independently apart from other

stages. Also the semi-structured interviews and the questionnaire are first analyzed individually before moving into the final stage which combines all of the three analyzing stages.

Semi-structured interviews

The interview recordings were transcribed and the analysis of the collected data was started with reading all of the material from beginning to the end as suggested by Corbin and Strauss (2008). The idea behind this was to enter vicariously into the lives of participants trying to feel what they are experiencing and telling to us. Also the rest of the qualitative analysis in this study tried to follow guidelines described by Corbin and Strauss (2008).

All of the interview transcripts were read individually and coded into categories. Coding was done by writing emerged themes to a word document and copying relevant conversation from the transcriptions. Whenever similar themes were found they were combined together. In the beginning over 40 different themes were recognized and they were then condensed into categories. To conclude the analysis all of the data were accounted for under the created category headings.

The findings of the qualitative interviews supplement the typical flaws of purchasing framework and they together create the foundation for the survey questionnaire.

Survey questionnaire

Main part of the questionnaire assesses the development potential in different activities of the purchasing process. In other words each of the statements in the main part measures how well the activity is performed in the case company. The statements were formulated so that answering “5” strongly agree indicates that the activity is performed well and there is not much to improve. Respectively, answering “1” strongly disagree indicates that the development potential is high.

In the qualitative interviews there appeared many challenges within the indirect purchasing process and also some internal challenges as well. In the questionnaire the respondent were asked to choose the phases in the purchasing process where they had faced any challenges when it comes to indirect purchases. In addition, they got to choose all the internal challenges that emerged in the earlier interviews and to write other challenges in their own words.

One objective for the questionnaire was to assess the implementation difficulty regarding the development of indirect purchasing. For these purposes the respondents were asked if involving someone from sourcing department evokes positive feelings, do they see advantages if sourcing

was involved and whether or not the case company should start developing its indirect purchasing.

In addition for analyzing the foregoing matters in general, the indirect categories were also compared to each other to find out which categories might have the largest development potential and therefore should be prioritized. A comparison was also made between Finland and other countries.

4 Empirical analysis

When one is starting a strategic sourcing initiative aiming for cost-savings amongst other benefits, one should begin by identifying categories and develop a sourcing plan for them (Payne and Dorn, 2012). In this case study the case company has already created preliminary categories for indirect purchasing. In the beginning of the empirical part of this study the indirect spend is divided into the existing categories. The spend analysis also helps to identify those categories where the savings opportunity is substantial (Payne and Dorn, 2012).

This chapter contains three different levels of spend analysis. First, spend analysis is performed in a category level. Then spend analysis is exploited to find out the spend-level opportunities that are present in the company. The chapter is concluded with a closer look to the transaction data and identifying transaction-level opportunities.

4.1 Spend analysis

The spend analysis was started by discovering the relevant systems which could help in finding out where the company is spending its money. There are currently over ten different enterprise resource planning (ERP) software in use. Substantially large number is probably caused due to several acquisitions that the firm has performed in the past. There is an on-going project which aims for integrating different EPRs into one ERP system.

The company also uses a spend management system and the indirect spend was classified into the system during this study. Before the automatic classification the indirect spend was analyzed manually. In the manual classification the 80/20 principle (see Koch, 1997) was utilized to keep work effort rational and meaningful as the overall number of suppliers in indirect categories is approximately 5000. It is common that transaction data can include the same supplier with several names. However, the spend management system used by the case company has already combined the data under single supplier name and therefore, the number of suppliers is sufficiently precise.

One way to look indirect spend of the company is to arrange suppliers by annual spend (Figure 8). This type of inspection shows that 80% of the indirect spend goes to 330 suppliers which are under 7% of the total number of suppliers used in indirect categories. Rest of the indirect spend is covered by 4630 suppliers. This kind of supplier structure may indicate possibilities for reducing the supply base and understanding who are the strategic suppliers of the company.

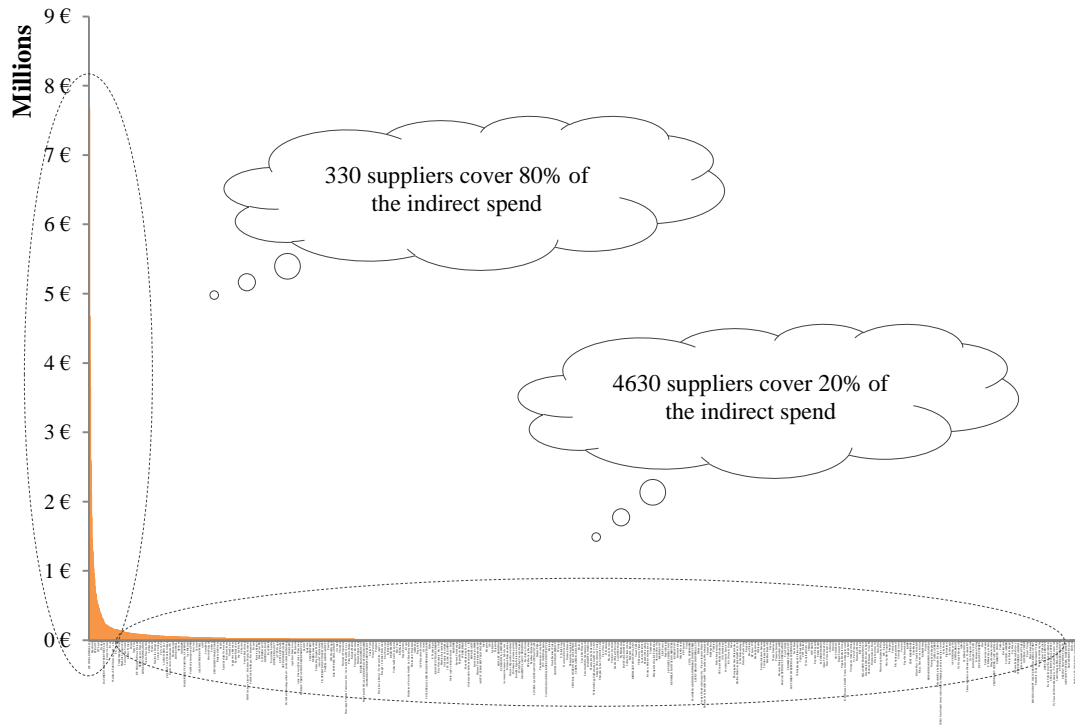


Figure 8 Indirect purchases by supplier

The results of manual and automatic spend analyses are close to each other and therefore, the figures of this spend analysis are drawn by using the values from the spend management system as it covers 100% of the available data instead of 80%. Two of the largest ERP systems have been integrated into the spend management system and they cover approximately 90% of the total indirect spend of the firm. The covered spend comes mainly from Europe and North-America, and it is taken from one year period.

Spend analysis in indirect category level

It is important to understand how the spend management system classifies the spend. First of all, when the company makes a purchase and receives an invoice for it, the invoice is posted to a specific account by a person who is often located in the department that is making the purchase. Different accounts are manually connected to sub-categories decided by one person or a group of people within the company. Sub-categories are then connected to the main categories which are introduced in the figures below.

In the beginning of this spend analysis the instructions of Monczka et al. (2011) have been followed. First, the spend was divided into different indirect categories created by the firm

(Figures 9 and 10). The company is spending most of its indirect money into logistics, sales and marketing, and personnel services categories. Those three categories cover approximately 50% of the total indirect spend of the firm. The smallest categories by spend are travel, office, and R&D and NPD.

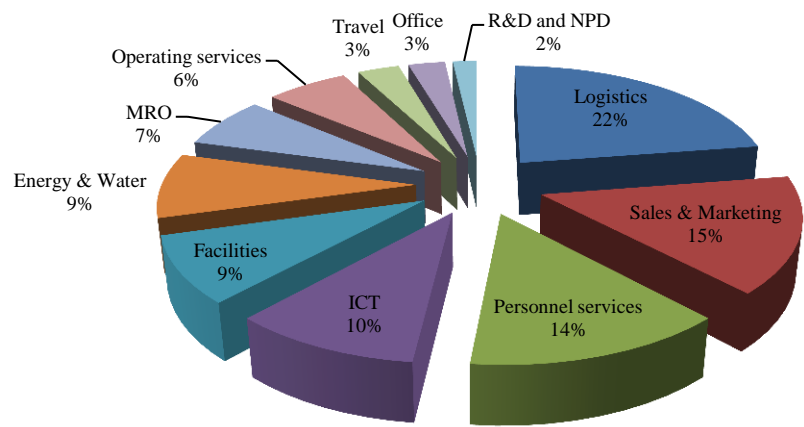


Figure 9 Percentage of total indirect spend by category

The indirect spend was also divided between Europe and North-America (Figure 10), and 78% of the indirect spend goes to Europe. In total the indirect spend of the firm is approximately 212 million euros.

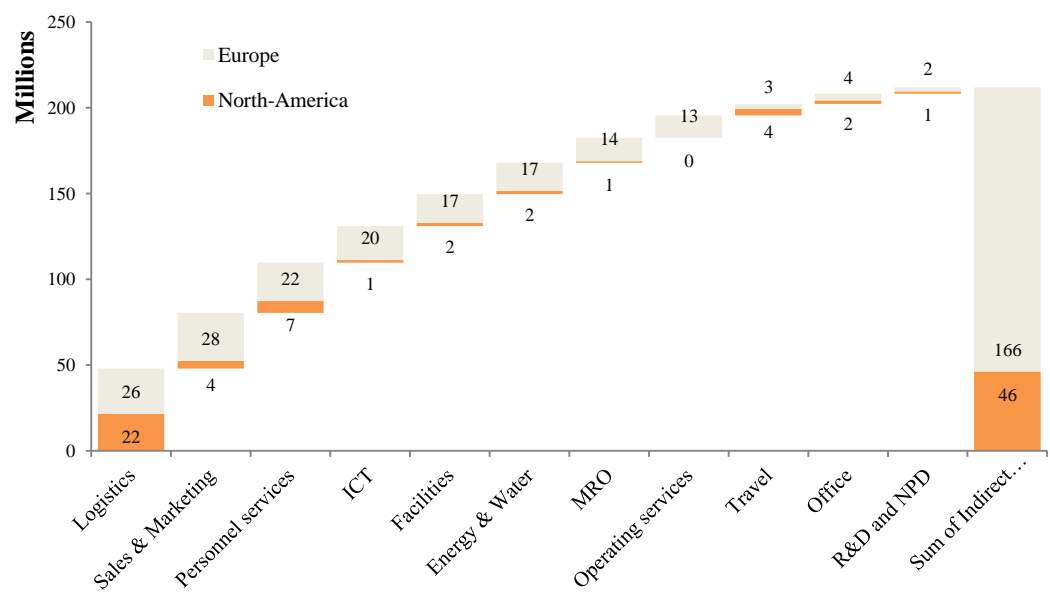


Figure 10 Indirect spend by category

Another issue to look for is the number of suppliers in each category. It is not surprising that there are the most suppliers in the sales and marketing department (Monczka et al., 2011), more than 1200 to be more specific. Also personnel services and MRO categories are served by more than 1100 suppliers. There might be opportunities for supplier consolidation in most of the categories which can lead to better costs, less work to manage suppliers and fewer transactions. The smallest number of suppliers is in the energy and water category which might indicate good exploitation of the bargaining power of the company in that field. Exact numbers can be found from the following figure (Figure 11).

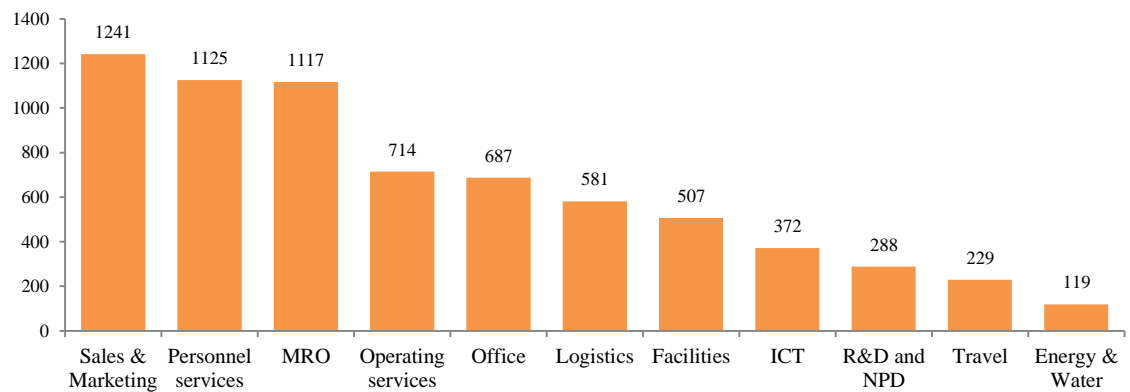


Figure 11 Number of suppliers by category

When the former two figures are combined we get indirect spend per supplier in each category (Figure 12). The biggest volume of spending by supplier is in the energy and water category. In contrast, the company is spending less than 10,000 EUR per supplier in office category which may indicate using of too many suppliers there.

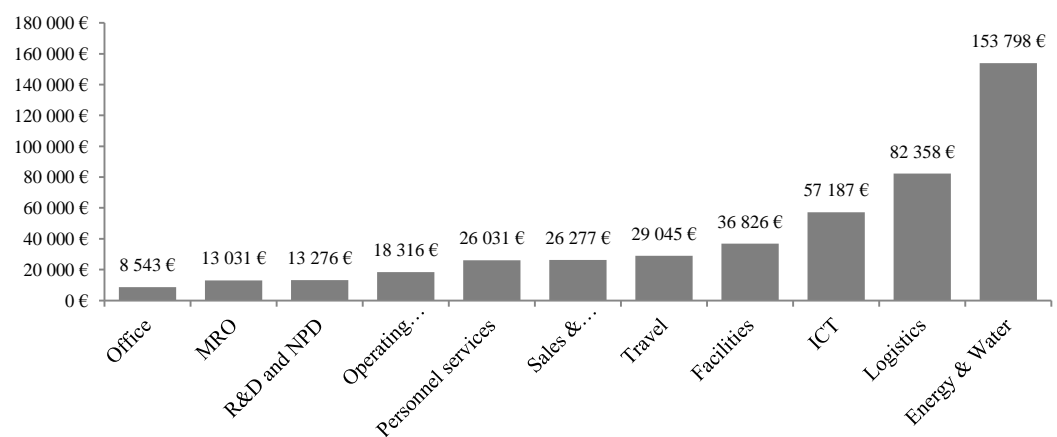


Figure 12 Indirect spend per supplier by category

Sales and marketing, personnel services and ICT are the biggest categories by spend and therefore, one can find a good opportunity for sourcing analysis leading possibly for cost savings and price reductions. Sales and marketing, personnel services and MRO categories have the largest number of suppliers and some savings could be achieved through reducing the supply base. Finally, office, MRO, and R&D and NPD categories have the smallest spend per supplier, and the company could get better prices and terms through increasing the spend per supplier.

Searching for spend-level opportunities

Pandit and Marmanis (2008) list some typical opportunities that can be identified through spend analysis. Opportunities can be divided into spend-level and transaction-level opportunities. The first spend-level opportunity is supplier rationalization and it was examined in category level (Figure 13). The following figure shows that the biggest opportunity lies in the MRO category. There is also a huge opportunity for supplier rationalization in sales and marketing, and operating services categories. Travel category seems to have the lowest opportunities and the reason is that most of the travel spend is allocated to credit card companies.

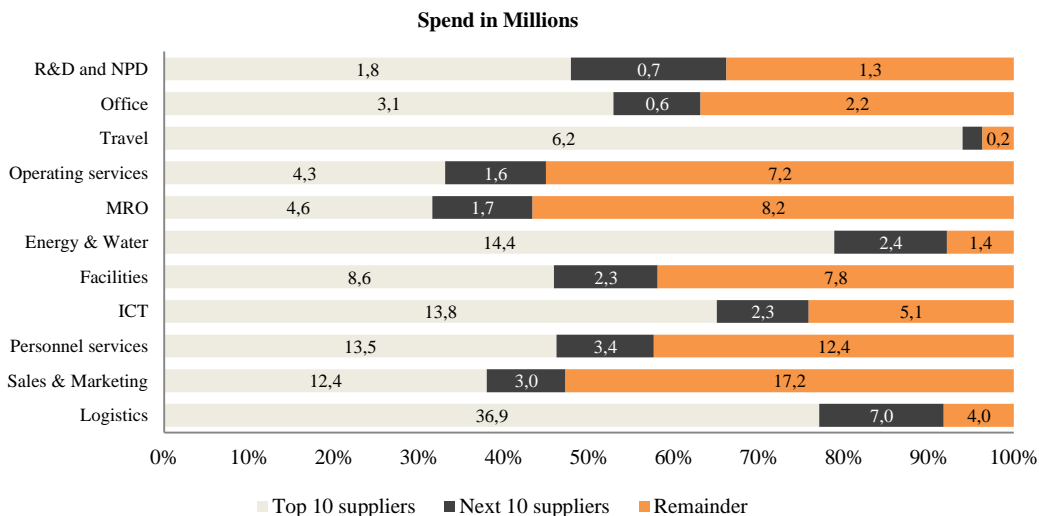


Figure 13 Commodity supplier rationalization

Bypass of the preferred purchasing process is another spend-level opportunity. One way to identify this opportunity is to see if the spend is tied to purchase orders (POs) or not. The results (Figure 14) are crucial and indicate that barely any of the indirect purchases are tied to a PO. Basically only some of the MRO types of purchases are tied to POs and closer look revealed that those purchases are conducted from one specific factory.

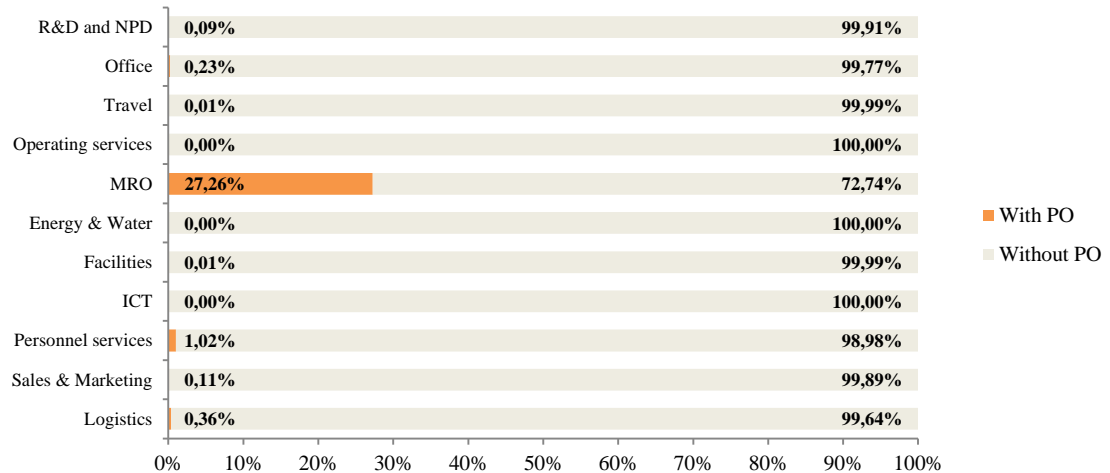


Figure 14 Percentage of spend with and without a purchase order (PO)

Inadequate supplier performance monitoring is also a cost savings opportunity which can be identified through spend analysis. Only 1% of the indirect spend of the company goes to approved suppliers (Figure 15). A percentage this low indicates that the company does not have a process or system for approving suppliers when it comes to indirect purchasing.

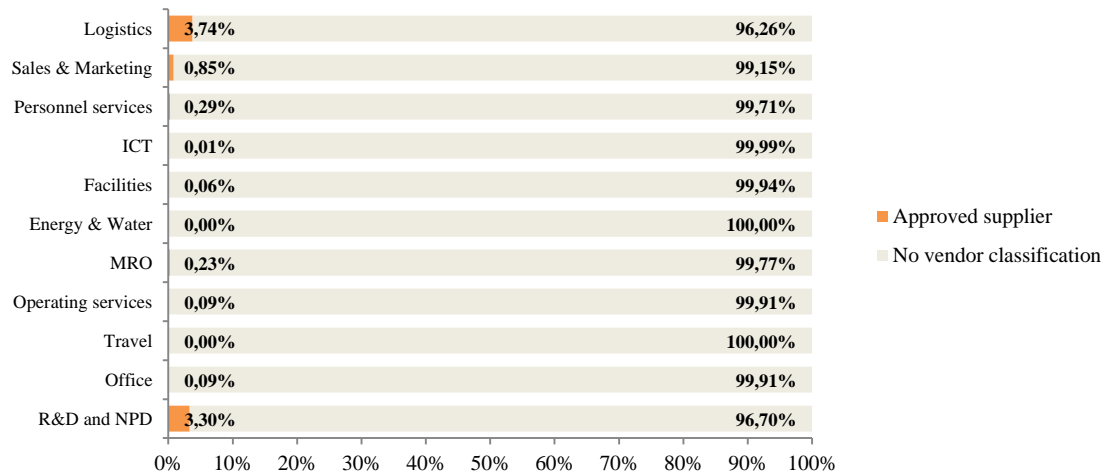


Figure 15 Percentage of spend through approved suppliers

Searching for transaction-level opportunities

First of the transaction-level opportunities are contractual term opportunities. However, the case company does not have a system which would integrate accounts payable and contract systems together. In addition, the researcher did not have access to contracts during this study. Therefore, it is impossible to assess through spend analysis if there occur contract violations or not.

As only few of the indirect purchases are done through purchase order, there is not much information available to see if the supplier delivers the right quantity at the right time. Anyhow, the available data was reviewed which immediately revealed few problems with the suppliers (Table 14). Both supplier X and supplier Z have delivered smaller quantity than was requested by the company. Both of the suppliers have also made one delivery later than what has been confirmed. In the latter case the delivery was more than one month late.

Table 14 Transaction data can reveal delivery problems

Supplier	PO line req. quantity	Confirmed quantity	Confirmed GR date	Actual GR date
Supplier X	12 860	10 360	2014-04-11	2014-04-14
Supplier X	12 860	10 360	2014-04-11	2014-04-11
Supplier X	10 500	10 360	2015-01-06	2015-01-06
Supplier X	10 500	10 360	2015-01-06	2015-01-06
Supplier Y	1 050	1 050	2015-01-07	2015-01-07
Supplier Y	550	550	2015-01-07	2015-01-07
Supplier Z	250	250	2014-09-03	2014-09-03
Supplier Z	250	250	2014-09-03	2014-09-03
Supplier Z	1 000	200	2014-07-24	2014-07-24
Supplier Z	1 000	200	2014-07-24	2014-09-03

Another transaction-level opportunity can be found by looking the payment terms used by the company. There was found many cases where the case company is purchasing indirect goods and services from one supplier with different payment terms. One example can be found from the table below (Table 15). It shows that three different business units within the case company are using the same supplier and they all have different payment term. The fact that the company is buying with different payment term from the same supplier raises suspicions that different business units may be buying with different prices as well. Transaction data does not show the content of the services and therefore, the payment amounts cannot be compared to each other.

Table 15 The case company buys with different payment terms from the same supplier

Indirect category	Supplier	Business Unit	Payment term	Payment amount
Personnel services	Supplier A	2	7	950 €
Personnel services	Supplier A	2	7	200 €
Personnel services	Supplier A	4	30	855 €
Personnel services	Supplier A	4	30	1 710 €
Personnel services	Supplier A	5	14	2 450 €
Personnel services	Supplier A	5	14	4 500 €

In addition to the payment terms being different, they also seem to be quite short. The average spend weighted payment term for indirect purchases in the company is 22 days. There is obviously an opportunity for negotiating longer payment terms. Better payment terms would realize in savings for the company when annual interest is taken into account.

4.2 Management interviews

4.2.1 Indirect purchasing is scattered around the organization

Before going deeper into how indirect purchases are made in the case company, it is important to understand the big picture of in which part of the organization different type of indirect purchases are currently made. First of all, logistics (e.g. transportation services and 3rd party warehouses) are already managed by a Sourcing Manager and therefore it is not under investigation in this study.

Human Resources (HR) department is purchasing a wide variety of different indirect goods and services. The largest part of their purchases is training services for staff. They also buy, for instance, coaching services, research services, employee benefit related goods and services, employee gifts, work clothing, office furniture, healthcare services and meeting services. HR Development department is responsible for purchasing global training services, but local HR departments also buy extra services independently if necessary.

People in Finance function are purchasing mainly distinct consultancy services in order to lead the financial organization. The purchased services include, for example, accounting services, tax services and whatever special expertise or resources are needed in different business development projects. There are several Finance departments located in different places and countries, and they are all purchasing finance development services for their own needs. Accounting and tax services are purchased centrally by the Group Finance department.

Production department contains in this study all the people in different factories as well as people responsible for those factories. Within this scope the production department is purchasing, for instance, work clothes, maintenance services, spare parts, tools, temporary labor and so forth. They also buy raw materials and packaging materials in collaboration with Global Sourcing department but those are not in the scope of this study. Each factory is mainly responsible for their own purchases and there can be even 40 people making purchases in a

factory of around 350 employees. In the last few years there has been made few frame agreements which cover all the factories in Finland.

Information Technology (IT) department is divided so that there is a Global IT organization which serves the whole corporation with different IT service activities, and then there are regional IT departments which are procuring local specific services. The purchases of the IT departments include software, infrastructure services, datacenter services, network services, application support, licenses, printers and some low cost IT supplies. The largest spend is external services like consultancy and development expertise for projects.

The company comprises over ten different brands which makes marketing slightly complex. At the moment, different brands are not collaborating much, and marketing services and materials are purchased individually for each brand. Usually every brand has its global department which is responsible for creating the global marketing guidelines and local marketing departments then localize it. Typical marketing purchases include design services, display (e.g. point of sale) materials and distinct consultancy services. The purchasing process is divided so that first the marketing materials are designed and produced with the help of external suppliers, and then local sales departments are doing the actual ordering of needed materials. In addition there is a small department responsible for buying market research services for the whole corporation.

New Product Development (NPD), and Research and Development (R&D) departments are discussed here as one mutual department. Most of their purchases are conducted by few people who are located in the headquarters. Their largest spend group is Intellectual Property Rights (IPR) which includes, for example, patents and trademarks. In addition they are buying design work as a service from engineering offices, different kind of certifications and testing services, and small supplies (e.g. competitors' products).

Final department that is dealt with here is the Facilities department. They are purchasing for instance real estate services (e.g. janitorial services), environmental services, security services and energy. Their responsibility includes basically everything related to facilities. Some of the purchases are made locally for instance by the factory manager, finance manager, maintenance manager or controller whom can be considered as a member of Production department as well. The facilities in other countries than Finland are managed independently. List of example purchases by departments can be found below (Table 16).

Table 16 Examples of indirect purchases made by different departments

Department	Examples of indirect purchases
Human Resources	<ul style="list-style-type: none"> Training services Coaching services Research services Employee benefit related goods and services Employee gifts Work clothing Office furniture Healthcare services Meeting services
Finance	<ul style="list-style-type: none"> Consultancy services Accounting services Tax services
Production	<ul style="list-style-type: none"> Work clothing Maintenance services Spare parts Tools Temporary labor
Information Technology	<ul style="list-style-type: none"> Software Infrastructure services Datacenter services Network services Application support services Licenses Printers Low cost IT supplies
Marketing	<ul style="list-style-type: none"> Design services Display materials Consultancy services
New Product Development and R&D	<ul style="list-style-type: none"> Patents and trademarks Design services Certifications and testing services Small supplies (e.g. competitors' products)
Facilities	<ul style="list-style-type: none"> Real estate services (e.g. janitorial services) Environmental services Security services Energy

4.2.2 Current practices of indirect purchasing

In this section the purchasing behaviors regarding indirect purchases are discussed. In order to represent the findings more clearly and in chronological order, the section is divided into the five phases of the purchasing process introduced in the literature review.

When discussing about the purchasing process in general, there could not be found any evidence that any department would have a written purchasing strategy or process description. In most cases the interviewee said that the process changes case-by-case and is dependent on the participants. One respondent even claimed that they do not have any kind of purchasing process which would be identified, known and followed. The purchasing was said to be very personified and not systematic at all. One interviewee even called the purchasing behavior as maverick buying.

The specification phase

In few cases the requirements and specifications are well discussed and reported before contacting any suppliers. This seems to be especially true when the purchasing takes place in a larger project group. One department even has a template which has been created by their team leader, and which is to be used before purchasing anything. The requirements are usually discussed together with the Business Owner whom represents often another department than the one doing the actual purchasing.

Some of the indirect purchases are made without defining own requirements. Even very large purchases may have been done based on the offer from the supplier. Recently the situation has got a little bit better, and the specifications and requirements are considered beforehand more thoroughly.

Defining own needs and requirements seem to be rarer when it comes to purchasing marketing services. However, marketing services often mean creative services and the content cannot be defined in so detailed level than in some other services. That can be one reason for defining the content together with the supplier.

Deciding the source of supply

There are different practices for following the supplier markets. The most popular ways based on the interviews are networking, attending supplier events and searching suppliers from the internet. However, only few of the interviewees applied this kind of practices. It was more common that the supplier markets for indirect goods and services are not followed

systematically or at all. It even appeared that supplier markets are followed only if the current suppliers cannot meet the needs. In one case the supplier market has not been checked for years.

There were two cases where the interviewee told that he or she is keeping a list of potential suppliers independently. In other cases the suppliers are not documented at all or as one of the respondents described it: “The list of suppliers is in my head”. One department has a supervisor who has worked previously in the industry which from they are buying services and he has personal knowledge about the supplier market. However, the personal knowledge and expertise which are not documented are only valid as long as the person is working for the company and participating in the purchasing process.

In most cases there are no basic requirements for the supplier company. Only few interviewees told they require the supplier to commit into the supplier code of conduct. The requirements are highly dependent on the product or service being purchased. For example, Marketing department purchases photographing and design services, and the supplier may be even a one person company. Some of the respondents try to check the financial background of the supplier but none has ever used an external company to do that.

It seems that a typical amount for sending requests for quotation is around three and some interviewees even mentioned that they require employees to contact at least from two to three suppliers. One person told he has sent even over 10 requests for quotation in the biggest cases. On the other hand, there were many respondents who may contact only one supplier without even considering others if not necessary (i.e. the current supplier cannot do the job).

All of the participants told that they try to use the current suppliers when possible. However, the reasons seem to vary greatly. As mentioned earlier some use the existing supplier every time if it can meet the current needs. There has gone even over 10 years without even considering any other suppliers. One of the reasons for not changing a supplier is the fear that a new supplier will fail in providing the requested service. Some of the respondents are using the existing supplier only if its offer is almost in line with other suppliers which sound sensible. The following citation implicates that even though the existing supplier is used, it might be done for the wrong reasons:

“As said using the existing supplier is the easiest way. In particular, if the supplier has offered a bottle of wine and golf course, and in addition is a nice guy then why not?”

It should be noted here that no other evidence was found during the current study which would indicate using suppliers based on personal relationships.

The criteria for choosing the supplier depend on the case. However, the fact that most of the purchases are done without considering the total cost of ownership (TCO) emerged. Only one participant said they are taking TCO into account and some were not even familiar with the concept. The importance of TCO was realized in some cases but it was also stated that it is not taken into account sufficiently. It was common that own resources that are needed were not taken into account. One common practice seems to be that, for instance, when purchasing a consultancy service, the service provider is chosen mainly based on the people and not the company itself. In addition there are no tools for comparing the offers from suppliers and usually the offers are in different forms which makes comparing even more difficult.

Negotiating and making a contract

There was only one case where the interviewee described they are using a systematic negotiation strategy. They gather a negotiation team in the most important cases, and the team then prepare for the negotiations by considering things such as what the targets are, what would be a good result and what is tried to achieve by these negotiations. Most of the respondents did not have any negotiation process at all and some started the negotiations after selecting the final supplier.

Some of the interviewees told that competitive tendering is not suitable in their situation and few said that the case company is so tempting from the perspective of the supplier that the offers are already sufficiently good. The content of the possible negotiations is not usually about the money but instead about the content of the service.

The practices for creating contracts as well as contents of them are very colorful. In some situations there is no contract at all, sometimes the contract is only verbal and sometimes the contract is created very carefully with the help of Legal department. Sometimes there might exist a contract but the respondent was not aware of it or at least did not know where to find the document. Usually the contracts are made by local units but there are also few country-wide frame agreements. Some of the critical aspects of contracts that emerged in the interviews are discussed below.

One thing to consider is that which company provides the contract template. In most cases the contract template comes from the supplier company. However, there are few exceptions. One department tries to use own template at least in big cases which is developed in co-operation

with Sourcing and Legal departments and one person has created his own 70 pages long contract template which he requires to be signed by every supplier. Otherwise the supplier will not be chosen. The Legal department is used to check all of the biggest contracts and some people even exploit Legal in smaller cases. However, using of Legal is not systematic and it could be exploited more. At least one department is also buying legal services from an external supplier.

The issues that are agreed in the contract vary greatly based on, for example, the type of product or service being purchased. One of the important issues to be agreed is the payment term. As one of the interviewees said it, there can be 60 different payment terms when there should be one or two. The payment term is very often whatever is suggested by the supplier. Few have always 14 days, some have usually 30 days and one told that they never even discuss about the payment term because they did not see it relevant. An interesting thing was also that some of those using 30 days stated it as the company policy which cannot be changed. However, there was found evidence that the payment term can be at least as high as 60 days.

Ordering

In most of the departments ordering is basically made via contract or email. However, one of the participants told that they have made a procure-to-pay (P2P) analysis which shows that sometimes there are no markings at all in system about the purchase. There are although some evidence that at least some of the MRO type goods are purchased via SAP ERP. Some of the Sales departments are using an electronic system provided by one of their suppliers to order the marketing materials.

Post-purchase activities

There could not be found any evidence of systematic supplier relationship management. Some people are in contact with few suppliers outside of projects as well but it is more like way of keeping in touch than developing the relationship together. It was also stated that they have not identified the strategic suppliers whom should be managed more closely. Moreover, the performance of the suppliers is not reviewed systematically.

To conclude the findings about the purchasing process of indirect goods and services it can be stated that the practices vary very greatly. The high variance results partly on the differences between goods and services purchased. However, there is also clear evidence that the practices within individual departments also vary depending on who is purchasing. In some cases same

kind of purchases are made within one department without anyone responsible for the completeness. There could be much more collaboration within and between departments.

4.2.3 Challenges regarding purchasing of indirect goods and services

The participants were asked about the challenges that they had faced regarding purchasing of indirect goods and services. In addition many challenges emerged during the interviews even without asking about them. The most common challenges are discussed in this section. There was found challenges related to every phase of the purchasing process from the need specification to the supplier relationship management. Moreover, many internal challenges were discovered.

There was mentioned few challenges already in the phase of defining requirements and specifications. There have been situations where the purchasers have not really known what they want and they have just bought the service based on the proposal of the suppliers because it sounded great. Later they noticed that they did not even need the service. Another challenge in purchasing consultancy services has been to estimate the needed resources (i.e. how many hours is required and is there a need for junior or senior level consultant).

By far the most recognized challenge was finding sufficient amount of suitable suppliers. This was especially the case with the consultancy services. In some situations this has meant postponing the project and sometimes the only suitable supplier has been chosen. In most of the cases there are much more great candidates in the markets but the supplier search is not conducted as it should be. The reason could be, for instance, the lack of time or lack of knowledge. Anyhow with better supplier market intelligence the company would be able to choose more suitable suppliers in to the negotiation process leading to better prices and terms.

The former issues can also be thought as a challenge in choosing the supplier. If there are not enough suitable suppliers, it is more difficult to make a great decision. It is also difficult to negotiate successfully with fewer suppliers. Another challenge regarding the supplier selection phase is to get a thorough cost break down. The cost break down is usually wanted to the negotiation phase but the suppliers are not willing to provide it or they might not be even aware of their own cost structure themselves.

As mentioned, the lack of suitable suppliers is also a challenge in the negotiation phase. There was not mentioned any other challenges regarding negotiating in the interviews. There was not much evidence about any kind of negotiations when indirect goods and services are purchased

which might explain the lack of challenges in the negotiation phase. Some of the interviewees spoke out that they are purchasing with too high prices and that the prices are not squeezed as low as they could be.

Quantitatively there was identified more challenges in the contracting and supplier relationship management phases than in the earlier phases. In the contracting phase the biggest challenges come from creating the contract. Contracting requires special knowledge which usually cannot be found from the department. Making the contract is also found very time consuming and there have not been any support available. Creating the contract without sufficient expertise has led to situations where the contract has been understood differently by the supplier and the case company. The lack of ready-made contract template was also mentioned. In addition there was said still to be many verbal contracts with the suppliers. In one case the case company has paid thousands of euros to a service provider for designing a service without having any contract in place or identifying a business owner.

Challenges in the supplier relationship management were mentioned number of times during the interviews. Some of the respondents even considered their biggest challenges being in supplier relationship management. There have been situations where the supplier has deviated from the agreed matters but there have not been enough resources in the department to control and monitor the supplier's work. One of the respondents admitted that they are paying too much because there is no clear and tight control. In addition there have been problems in the delivery times and the security of the supplies has not been where it should be. One of the interviewees claimed that the supplier relationship management is keeping their managers very busy as they are not professional purchasers.

There emerged many internal challenges as well. First of all, there is not enough time to conduct the purchasing process professionally which has led to longer projects (e.g. a project which normally lasts for three months has lasted for one year). There is no sufficient visibility to spend, purchases or existing contracts. One reason for the lack of spend visibility is that the costs are posted into various legal companies. As there is no overall control over the indirect purchases, there are uncertainties about different units using same suppliers with different prices. The lack of collaboration between units means also that the company is not gathering all the advantages of consolidating the purchases between units.

The lack of expertise regarding purchasing and the lack of uniform purchasing processes were also challenges that emerged in many interviews. It was stated that people who are conducting indirect purchases currently are not professional buyers, and also that there are no capable resources for purchasing indirect goods or services in the company. It was believed that standardizing purchasing processes within the company could bring number of advantages.

4.2.4 Development of indirect purchasing in recent years

One interesting matter that arose in many interviews and which is discussed here next is that there can be recognized some development in the purchasing of indirect goods and services in the case company recently.

One department has got a new team leader who has brought perspective into how the requirements and specifications should be defined before discussing with any suppliers. Marketing department is using an electronic procurement system in some of its units for ordering the marketing materials. The system is provided by one of their suppliers. It is however unclear what kind of contract is made with the supplier as the interviewees were not aware of the possible contract. One unit has made their own brief template which is used for defining the desired deliverables.

There has been some development going on in the Production and Facilities departments as well. For example, there have been discussions about a centralized inventory which could include spare parts for several factories. In addition some of the property services and temporal labor services were consolidated few years back, and the yearly savings from the latter are hundreds of thousands of euros.

As it can be seen, there have been some major improvements recently when it comes to the purchasing of indirect goods and services. However, many of the improvements are mainly related to individual people and their personal knowledge. The improvements have taken place mainly within single units, and there are no signs of systematic development of the purchasing processes. The savings that have already been achieved emphasize the hidden potential regarding the purchasing of indirect goods and services. The full savings potential can only be achieved by involving professional purchasers into the projects, and by standardizing the processes within the corporation.

4.2.5 Involving Sourcing department into indirect purchasing

There are currently very little collaboration between the Sourcing department and others when it comes to indirect purchases. People from few departments have not cooperated with the people from Sourcing department at all. This is interesting as involving Sourcing department into doing indirect purchases provoked mainly positive feelings among the interviewees.

None of the respondents clearly stated having any negative feelings about the involvement of the Sourcing department. However, it seems that the Marketing, and Research and Development (including New Product Development) departments did not have as positive feelings as, for example, Information Technology, Human Resources, Production, Finance and Facilities departments. The main purpose of this section is to reveal the potential advantages and disadvantages that could result from involving the Sourcing department in the purchasing of indirect goods and services which is currently conducted independently by the departments.

A number of different advantages emerged during the interviews. The Sourcing department is seen to be the most valuable in the negotiation and contracting phase of the purchasing process. The purchasing process is seen to get more efficient and standardized. It will make the purchasing more cost efficient and clear cost savings will be achieved. People from the Sourcing department are seen to bring purchasing expertise leading to, for instance, reduced risks, standardization of contracts, increased effectivity and volume benefits. In addition there will be another point of view which is highly appreciated. Involving Sourcing people into indirect purchases will also release resources of other people and they can concentrate on their primary work tasks.

Almost every interviewee stated that they cannot think of any potential disadvantages but they often still named one because it was asked. Few mentioned that the purchasing would not be free anymore but instead it would get more systematic. However, they all continued that they actually think it is good for the corporation and something that they need. Another thing that emerged is that Sourcing people need to understand what is needed and they should not be the one deciding the content of the service or what kind of supplier is required. It was also mentioned that the processes could get more bureaucratic and slow, and for those reasons Sourcing should not be involved in small purchases. One was also afraid that the main driver in purchases would be the price.

It is obvious from the responses that there are seen to be much more advantages from the involvement of Sourcing people in the purchasing of indirect goods and services. The potential disadvantages are also real and they should be taken into account when creating the strategy for managing the indirect purchases. All of the emerged advantages and disadvantages are summarized in the following table (Table 17).

Table 17 Advantages and disadvantages from involving Sourcing department

Advantages	Disadvantages
More efficient purchasing process	Purchasing not free anymore
More standardized purchasing process	Needs are seen differently
Increased cost efficiency	More bureaucratic purchasing process
Cost savings	Slower purchasing process
Increased purchasing expertise	Purchasing turns cost-driven
Reduced risks	
Volume benefits	
More effective use of resources	

4.2.6 Summary of findings

Indirect purchasing is scattered around the case company. Many units are purchasing indirect goods and services for their own needs. Sometimes one department can act as “purchasing department” for another. For example, human resources are purchasing consulting services for business units. It is also common that local units purchase indirect goods and services for their own needs. Different units within one department are rarely doing any kind of collaboration regarding indirect purchasing. Moreover, there is no cooperation between departments at all.

There is no purchasing strategy or process description made for indirect purchasing. Purchases are made case-by-case and purchasing practices are fully dependent on the purchaser. Indirect purchasing is not systematical but instead it can be described being very wild. It is evident that maverick buying is present in one or more different forms.

Purchasing practices vary greatly in every phase of the purchasing process and even though there could be found some good practices as well; a large proportion of the current practices involve major improvement opportunities. Some of the indirect purchasing is done based on proposal of the supplier without defining own requirements and specifications beforehand.

Supplier markets are not followed sufficiently and there is often no list of existing or potential suppliers. The current supplier may be used as long as it can deliver what is needed, and supplier

markets are investigated only if the existing supplier does not fill the needs. Usually there are no requirements that the supplier needs to meet to be selected. The company has created a supplier code of conduct but only few people demands it to be signed by the supplier. Moreover, the number of suppliers typically contacted is rather low.

Indirect goods and services are usually bought from an existing supplier. However, the reasons for using an existing supplier are often wrong. In the worst case personal relationships can influence more to the supplier selection than rational reasons. Even though the same supplier have been used for years there do not seem to be any partnership arrangements done and the long relationship is not leveraged as it could be. There is only few frame agreements made that concern more than one unit.

Total cost of ownership (TCO) is basically an unknown concept when it comes to indirect purchasing in the Company. This means that the true cost picture is not analyzed but instead the price informed by the supplier is used to evaluate the profitability of the purchase.

Negotiations are often used only to discuss about the content of the service and the price is not negotiated at all. Sometimes there might be formal negotiations after the final supplier is already chosen. It is often believed that the supplier is already offering a good price as the company is desired client. In other words negotiations are usually neglected and they are not prepared sufficiently.

Indirect purchases are often made with verbal contract or even without contract at all. If there is a written contract, the contract template usually comes from the supplier and the template is checked by the legal department only in larger cases. As own contract template is rarely used the content of the contract can vary greatly. For instance, the payment term is usually from 14 to 30 days when it could be even 60 days in some cases. Purchase orders (POs) can be made on paper or by email, and very often there is no evidence of the PO at all.

There is no evidence of supplier relationship management in indirect purchasing. Existing suppliers are not listed and their strategic significance is not taken into account. Supplier evaluation is often done only if some problems appear.

People who are responsible for indirect purchasing found many challenges. Most of the challenges seem to relate to making contracts and managing supplier relationships. The largest problems regarding making contracts are lack of knowledge and lack of time. It is difficult to say

if it is due to foregoing problems or something else but there are a lot of verbal contracts. Many indirect purchases are done without any type of contract in place.

The main problems in managing suppliers occur when a supplier deviates from agreed matters. This can mean, for instance, late deliveries or problems in security of supply. There is no clear and tight control over suppliers. Main reason for not managing suppliers properly is lack of resources. One major challenge is that people doing indirect purchasing do not find enough suitable suppliers. This is a consequence of not providing a sufficient supplier market intelligence and it reflects to later phases as well. It is more difficult to select a supplier if there are only one or few options, and negotiating a great deal might be impossible.

In addition there are a large amount of internal challenges regarding indirect purchasing. These are, for instance, lack of time, lack of visibility, lack of standard processes, lack of purchasing knowledge, lack of overall control and lack of cross-functional collaboration.

Support of Sourcing department would be seen mainly as positive matter and many interviewees even wish for it. There are probably some differences between departments and based on the management interviews the biggest resistance is in R&D and Marketing departments. However, sample size in the management interviews is rather small which reduces the reliability of the former statement.

There was found more advantages than disadvantages for involving Sourcing people in indirect purchasing. The purchasing process is expected to get more standardized and effective, cost efficiency is expected to reduce and pure cost savings could be achieved. It would also enhance the use of resources, bring purchasing knowledge and volume benefits, and reduce risks.

The involvement should be conducted so that the purchasing process would not get too bureaucratic and slow, purchasing should not get too cost-driven and the requirements need to be discussed with the internal customers.

4.3 Indirect Purchasing Survey

This chapter deals with the most significant results of the questionnaire. First, indirect purchasing is assessed from general perspective and later different departments and locations are compared. The results are analyzed in more detail in the following chapter which combines all of the findings from spend analysis, management interviews and indirect purchasing questionnaire.

Indirect purchasing in the case company from general perspective

The main part of the questionnaire measures the development potential in different activities in the purchasing process. The results show that the biggest development potential relates to the purchasing order (PO). It seems that an adequate PO is produced only very rarely when it comes to indirect purchasing. In contrast most of the supplier decisions are made based on rational reasons instead of personal relationships. Or at least only few of the respondents admit that personal relationships would influence on the supplier selection.

In general there is a lot to improve in almost every activity of the indirect purchasing process. The average value for all of the 22 items that are supposed to assess the development potential is 3,288 which show that many of the typical flaws regarding purchasing occur in the case company. The comprehensive list of assessed activities can be found below (Table 18). The activities are listed from the biggest development potential to the smallest.

Table 18 List of potential development targets from the biggest potential to the smallest

Question	Average	Development target description
24	2,61	Purchasing through adequate PO
27	2,78	Evaluating supplier performance systematically
16	2,96	Keeping a list of potential suppliers
22	2,96	Using own contract template
17	2,98	Preparing for the negotiations
30	2,98	Evaluating supplier performance actively
23	3,08	Ensuring good contractual arrangements
26	3,08	Minimizing transaction costs
18	3,16	Putting effort on the negotiations
11	3,18	Analyzing supplier markets actively
15	3,18	Pursuing all of the supplier market opportunities
25	3,22	Matching invoices with other documents
21	3,31	Exploiting the whole bargaining power
28	3,31	Identifying the strategic partners
12	3,39	Adequate background check for suppliers
29	3,39	Developing supplier relationships actively
10	3,45	Defining specifications properly
13	3,49	Considering the total cost of ownership (TCO)
9	3,71	Defining requirements and specifications internally
19	3,80	Aiming for better prices
20	3,98	Using well documented contracts
14	4,33	Selecting suppliers rationally
	<i>3,288</i>	<i>Average development potential</i>

Only 24,49% of the respondents thought that there is a company-wide strategy in place for indirect purchasing. Such a low number indicates that there is no indirect purchasing strategy in the company or if there is one, employees are not aware of it. 30,61% stated that there is a department-wide strategy for indirect purchasing. Moreover, it seems that indirect purchasing is very rarely performed through a systematic purchasing process as less than one third (32,65%) answered that indirect goods and services are purchased through systematic process. 46,94% thinks that there is sufficiently precise information available regarding indirect purchases (Table 19).

Table 19 General questions about indirect purchasing in the company

Yes	No	I don't know	Statement description
24,49%	44,90%	30,61%	Company-wide strategy for indirect purchasing
30,61%	65,31%	4,08%	Department-wide strategy for indirect purchasing
32,65%	55,10%	12,24%	Purchasing through systematic process
46,94%	42,86%	10,20%	Information of indirect purchases is precise

There appeared a large number of different challenges in the management interviews and therefore, the respondents of the questionnaire were asked in which phases of the purchasing process they have faced challenges (Figure 16). Even 59,18% of the respondents have faced challenges in searching, evaluating and selecting the supplier. Contracting and negotiating were separated in the questionnaire and less than half had had some type of challenges in the contracting phase. Defining needs, requirements and specifications was the third challenging phase as 40,82% of the respondents identified some challenges in that particular phase.

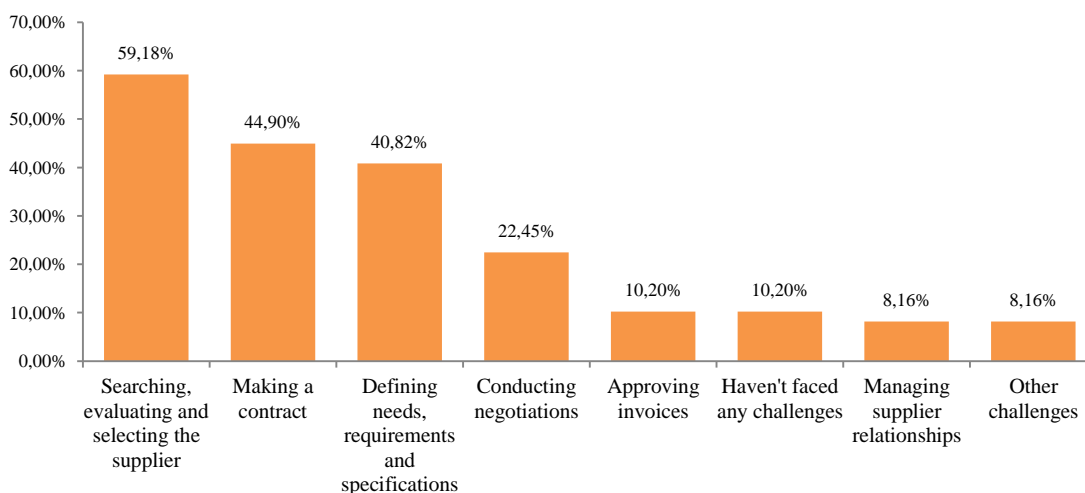


Figure 16 Challenges regarding indirect purchasing in the purchasing process

Only 10,20% told that they have not faced any challenges regarding indirect purchasing. Other challenges mentioned include problems with suppliers, difficulty of defining the outcome of the service and not understanding the authority for purchasing and signing contracts.

In addition for facing challenges in different phases of the purchasing process, there can appear many internal challenges which influence to the success of any purchasing initiative. Approximately 50% of the people performing indirect purchases think that lack of standard processes regarding indirect purchasing is challenging and almost equally many claims that they do not have enough time to pay attention for these purchases. Over 40% see lack of cross-functional collaboration challenging. Moreover, 36,73% think they do not have sufficient purchasing knowledge. Only 6% of the respondents have not faced any of these internal challenges (Figure 17).

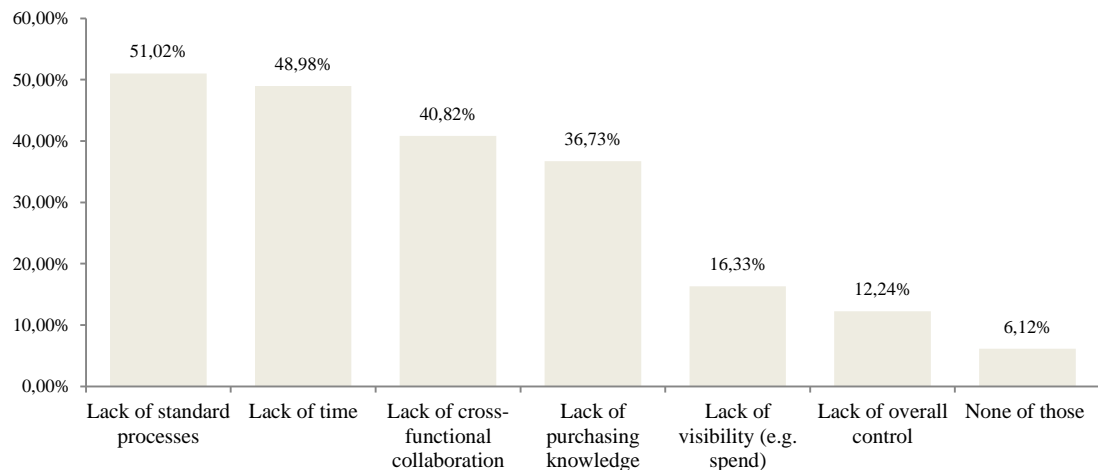


Figure 17 Internal challenges

The findings of the management interviews strongly indicate that people performing indirect purchasing see a number of advantages in involving the Sourcing department in the indirect purchasing process. The questionnaire figure out which are the phases where the Sourcing department is believed to bring most advantages. Once again negotiating and contracting were separated. 65,31% of the respondents think that the Sourcing department could bring advantages in making a contract. More than 50% of the respondents also believe that the Sourcing department could bring advantages in searching, evaluating and selecting the supplier, and in conducting negotiations. For the full list see Figure 18 below.

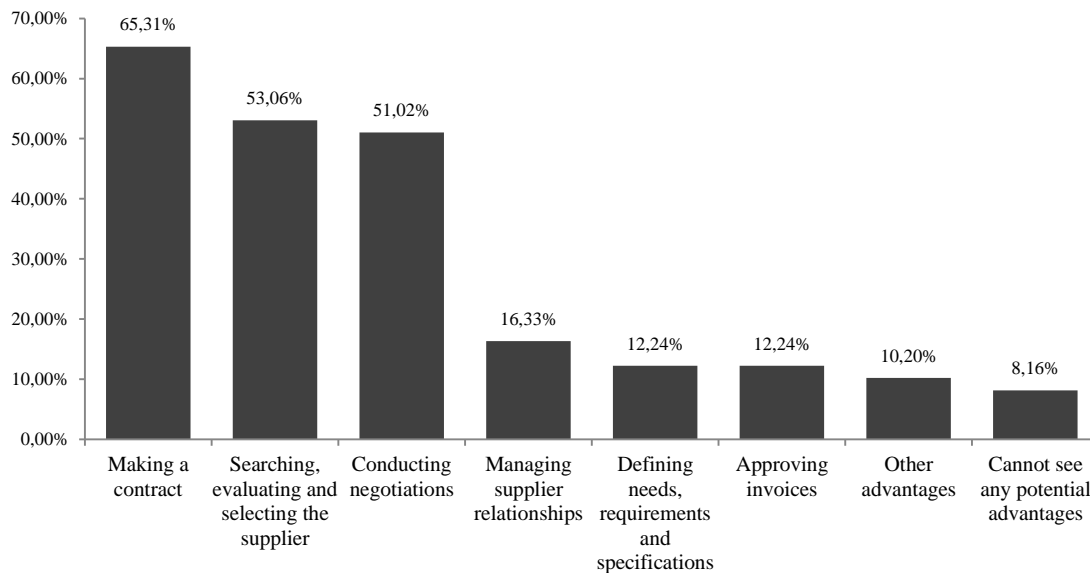


Figure 18 Phases of the purchasing process in which the Sourcing department could bring advantages

Other advantages mentioned include mainly activities related to managing indirect purchases as a whole. For example, many of the respondents think that indirect purchasing policy, process and instructions should be defined by the Sourcing department.

Differences between departments and locations

The respondents can be divided into eight different departments. Two of the departments (i.e. marketing and facilities) have 3 responses whereas human resources and production have nine responses. Therefore as the number of responses in each department is rather low the results are not statistically significant. However, the results are suggestive and they can be used to compare departments but with critical mindset only.

According to results (Table 20) the largest development potential is in the indirect purchases made by the finance department. The difference is quite big to the second potential development department as the average of finance is 2,520 whereas in human resources the same value is 3,242. Based on the results indirect purchases that are made by marketing or facilities departments have the smallest development potential. However, there is a lot to be improved in those departments as well.

Table 20 Development potential by department (small value indicates high potential)

Department	Number of respondents	Development potential
Finance	7	2,520
Human Resources	9	3,242
Sales	7	3,260
R&D and NPD	7	3,318
Information Technology	4	3,364
Production	9	3,489
Facilities	3	3,848
Marketing	3	3,939

In the end of the questionnaire there were three questions which assess the implementation difficulty in a department or category, or on other words they can be seen to measure the internal resistance. Two of the items are statements with a 5-point Likert scale and the last question has two alternatives; yes or no. In order to give equal weight to each statement/question the percentage of the yes or no question is multiplied by 4 and the result is summed by 1. Therefore, each of the three items has a value from 1 to 5.

Based on the results there may occur the most resistance in the marketing department regarding developing indirect purchasing in the company. The implementation can be also difficult in the information technology and production departments. The most favorable receiving is expected to be in the finance department. Finance and facilities departments were the only ones where every respondent thought that the company should start developing indirect purchasing.

Table 21 Implementation difficulty by department (small value indicates difficult implementation)

Department	Implementation difficulty
Marketing	2,67
Information Technology	2,83
Production	3,08
Sales	3,67
Human Resources	3,74
R&D and NPD	3,86
Facilities	4,22
Finance	4,71

Headquarter of the company is located in Finland and therefore, it is sensible to compare responses between Finland and other countries. The results show that there could be bigger development potential in Finland compared to other countries. In addition, employees located in Finland would be much more willing to receive help when it comes to indirect purchasing. There

is no difference in the purchasing experience of the employees in Finland compared to other countries (Table 22).

Table 22 Comparing the results between people located in Finland and other countries

Country	Number	Experience	Development potential	Implementation difficulty
Finland	30	3,53	3,188	3,900
Others	19	3,53	3,445	3,265

This section can be concluded by stating that approximately 4 out of 5 (79,59%) employees in the case company think that the firm should pay more attention to indirect purchasing and start developing it.

5 Recommendations and conclusions

The main objective of this study was to identify how the case company could develop its indirect purchasing. The most potential development opportunities were discovered, and recommendations based on the findings were given. The following figure (Figure 19) summarizes the most important findings and recommendations of the current study.

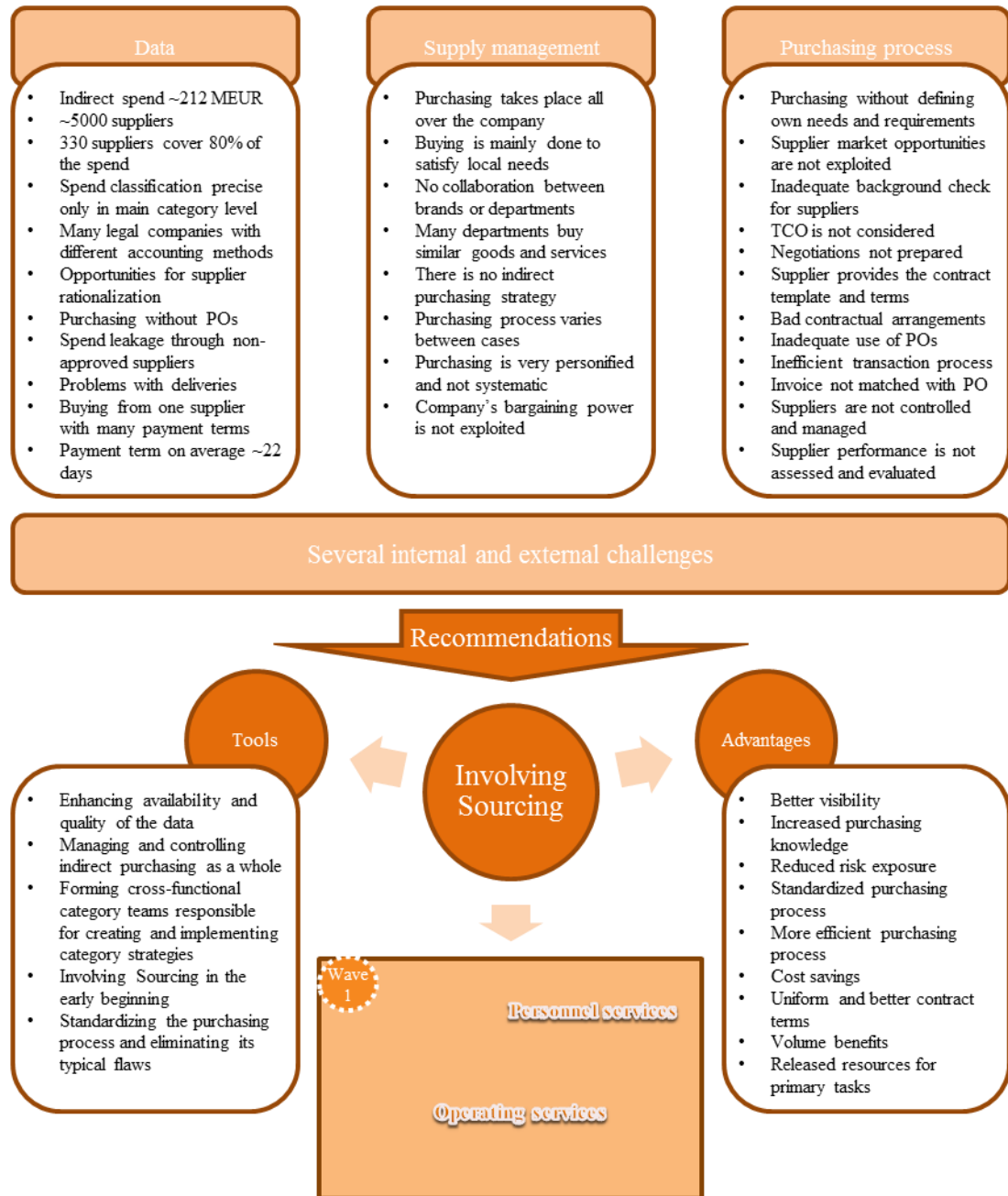


Figure 19 Summarizing the key findings

5.1 Overview and recommendations for the case company

The empirical analysis of the current study consists of three different parts, including spend analysis, management interviews and purchasing survey. This section represents inferences that can be drawn fairly from the foregoing independent parts as a whole. The findings that are shown below include also recommendations for the case company.

A framework for identifying typical flaws in purchasing management and process were presented in the end of the literature review (chapter 2.4). According to the current study “selecting suppliers based on personal relationships” was the only flaw that could not be confirmed for certain. All other flaws appear more or less in the case company. The current state of indirect purchasing is more reactive than proactive by its nature.

This section starts with discussing about the importance of available and precise information which also creates the foundation for development projects. Second matter deals with managing indirect purchasing as a whole. Subsequently, development targets within the purchasing process are discussed. The section concludes with recommendations for involving Sourcing department and first categories to be implemented, and reveals the cost savings potential in indirect purchasing.

High quality data creates foundation for developing and managing indirect purchasing

The case company has increased through organic growth and several acquisitions during its history. Every firm is using their own IT systems and therefore, the case company has more than ten different ERP systems in use. In addition, the corporation comprises number of distinct legal companies which are all responsible for their own accounting. There are probably as many ways of posting costs as there are legal companies. There are almost 5000 suppliers annually for the case company for indirect purchases. Each supplier may be using different systems and invoicing practices can vary greatly.

At the moment, the data related to indirect purchases is very fragmented and reports rarely include any kind of description of the product or service being purchased. The biggest reason is probably that most of the indirect purchases are done without an adequate PO. Even though, one could find out for which legal company the invoice has been posted, there is still a long way for discovering who has made the actual purchase and what he or she has bought.

Almost 47% of the respondents think that they have sufficiently precise information available regarding indirect purchases. Only about 16% of the respondents keep the lack of visibility (e.g.

spend) as a challenge. Those numbers indicate that some people feel that they have good visibility for the purchases they make. However, spend analysis shows that there is no overall visibility for the indirect purchases. Interviews support the foregoing claim and add that there is no visibility within the functions or departments either.

In order to exploit all of the development opportunities in purchasing there has to be a full visibility for all the purchases. A good visibility creates a foundation for identifying and developing issues. With a good visibility the company understands where it spends its money, from whom it is purchasing and who is doing the actual operative purchasing task. With the visibility the company is also able to coordinate the purchasing, and aggregate larger volumes for lower number and better performing suppliers leading to lower prices and risks, and better contract terms.

Enhancing the data includes also contract documents, supplier lists and so forth. At the moment, there are probably numbers of contract documents in the closets of the local departments and only the local personnel are aware of those, if even they are. People doing indirect purchases do not keep any list of potential suppliers, not even for themselves. This leads to that the company is not fully exploiting the supplier market opportunities.

The case company is going into the right direction as they are integrating some of the ERP systems into one system. However, this is not enough as the information systems could be exploited much wider and better. The spend management system will help in managing indirect purchases but there is still a lot of work to be done before the data is reliable and sufficiently precise. The data can be used to compare the main indirect categories but improvements need to be done before using the data of sub-categories. First thing to do is to link the cost accounts once more with the sub-categories but that are only first aid. In the long run there should be done some standardization within the whole corporation regarding the whole procure to pay process.

Managing indirect purchasing as a whole is the key to success

This study has shown that indirect purchases are done around the whole corporation without anyone responsible for the overall management. It is evident that there is no corporate-wide strategy created for indirect purchasing even though little less than 25% of the respondents thought that there is. It is also very rare that there would be any kind of strategy in place within the departments. None of the interviewees admitted that there would be a department-wide strategy for indirect purchasing and in the survey the percentage was less than 31%.

Spend analysis indicates that either there is no preferred purchasing process created for indirect purchases or if there is one, it is not used. Both the management interviews and the purchasing survey confirmed the former option. Even departments do not have any agreed purchasing process which could be followed but instead, purchasing is extremely personified and practices are highly dependent on the person doing the purchase. At the moment the professionalism of the purchase goes hand in hand with the knowledge and use of time of the buyer. Unfortunately, half of the respondents do not have enough time to put effort on purchasing and more than one third do not have the required purchasing expertise.

With a mutual indirect purchasing policy and practices the case company could avoid purchasing being so dependent on the expertise and experience of the buyer, and the professionalism would remain in the company even though there would be changes in the personnel. According to spend analysis there are plenty of chances for supplier rationalization. In order to exploit that kind of opportunities there has to be someone responsible for indirect purchasing as a whole.

Standardizing actions and managing purchases as a whole would lead to uniform and better contract terms. In addition, the firm can get lower prices and better terms by aggregating demand to a specific supplier. This often leads to better customer service as the supplier sees the company as more important client. The biggest internal challenge in the survey was the lack of standardized processes. Managing indirect purchasing as a whole and creating a mutual company policy are answers to that challenge.

There are number of options for organizing indirect purchasing and its tasks across the whole organization, and the most suitable structure may vary between categories. It is evident that there should be a company-wide policy for indirect purchasing and indirect purchasing should be managed centrally as a whole. However, in many situations the operative purchasing should take place in a decentralized manner within agreed frame agreements and methods.

Purchasing tasks can be arranged in many ways and it should be considered carefully which kind of organization model is used in each situation (Iloranta and Pajunen-Muhonen, 2012). The current study shows that different business units and departments are purchasing lots of similar goods and services and therefore purchasing tasks should not be organized by business units or departments. Purchasing tasks can also be divided by supplier but that model is very vulnerable for partial supplier selections (Iloranta and Pajunen-Muhonen, 2012). The same person should not be responsible for operative buying and negotiating contracts.

Based on this study the most suitable organization model for the case company would be organizing indirect purchasing by categories. The most efficient strategy for each category can be decided, for instance, by arranging categories into the Kraljic's matrix (Kraljic, 1983). In many situations the case company should utilize the *lead buyer* concept (see e.g. Iloranta and Pajunen-Muhonen, 2012) which shortly means forming a cross-functional team that encompasses professionals from the essential units. The buyers and specialists are then responsible for creating the strategy and making the purchasing decisions together.

A number of issues could be improved in the purchasing process

This section takes closer look into the development targets within a purchasing process. Based on this study there are things to be improved in every stage of the purchasing process, and probably in every smaller activity as well. By improving the purchasing process many of the challenges regarding indirect purchasing could be avoided.

Indirect purchases are usually done without an adequate PO. This can be seen from the spend analysis, management interviews and purchasing survey. This is very critical activity as it influences many matters and causes challenges in purchasing. By increasing the percentage of indirect purchases conducted through adequate PO, there will be more data available for the company and the accuracy of the data improves. Correct development actions may lead to lower transaction costs because electronic PO can in some systems be connected with the invoice automatically which reduces manual work.

Second major development target within the indirect purchasing process is the follow-up and evaluation of the suppliers. People responsible for indirect purchases do not usually assess performance of the suppliers systematically and actively which would enable comparing suppliers and following their development. In most of the cases the performance of the supplier is evaluated only when there appear some major problems.

There appeared some major challenges related to performance of the suppliers regarding indirect purchases. Suppliers deviate from agreed matters, and there are sometimes problems with time of delivery or security of supply. These challenges could be minimized by actively and systematically assessing the performance of the suppliers.

Perhaps the biggest challenge of all was in finding suitable suppliers. One of the reasons is probably that people doing indirect purchases do not document potential suppliers in any way and supplier markets are observed only if the current supplier cannot meet the demand anymore.

This way of working leads sometimes to rush in the supplier selection and therefore, all of the opportunities of the supplier markets are not exploited.

The best solution would be an electronic supplier list which would be available to everyone and which would be updated actively. This would help in reducing the supply base and also in avoiding overlapping work as many people would not have to search every supplier for same kind of products or services. If the company would exploit the supplier market intelligence better, it would gain advantages also in later phases, including negotiations. There would be more suppliers giving their solutions and participating in bidding or negotiating.

Searching, evaluating and selecting suppliers includes also various other development targets. For instance, the background of the suppliers could be checked more adequately and TCO could be taken into account better. At the moment, TCO seems to be unknown concept for most of the people doing indirect purchases in the company. It is more common that only the actual purchase price is taken into account.

There appeared an argument in the management interviews that suppliers would be chosen based on personal relationships in some situations. This argument could not be confirmed with the survey as most of the respondents answered that they choose suppliers based on rational reasons. However, in order to prevent the possible misbehavior in supplier selection all of the steps and reasoning behind decisions should be well documented.

One of the most important development targets is negotiating and contracting. There did not raise many challenges regarding negotiating in the study. On the other hand the survey shows that negotiations are not prepared and not enough attention is paid. In the management interviews came up that in many cases negotiations are totally neglected. That is probably the reason why there could not be identified that many challenges. Inadequate effort on negotiations has led to that the case company pays more to its suppliers than is necessary. This fact was confessed in the management interviews as well and it is odd that nothing has been done so far to fix the problem.

It is anxious to see that contractual arrangements are not treated with sufficient seriousness. Management interviews raised concern that indirect purchases are often done without any written document. However, survey did not wholly confirm this claim. At least most of the indirect purchases include a written contract. If there is no frame agreement in place, then the PO

works as a contract. As there is no certainty about written contracts based on this study, the case company should pay attention to them and get familiar with the current contracts.

In most of the indirect purchases the contract template and therefore, contract terms come from the supplier. Usually there are no actions conducted in order to influence the content of the contract. Foregoing issues lead to various contract terms which show, for example, as variation and shortness in payment terms. From financial perspective the company should pursue for as long payment terms as possible.

One of the challenges that emerged was the lack of own contract template that could be used or easily modified for indirect purchases. Therefore, the case company should develop one or more templates for indirect purchases as it would directly tackle some challenges. Using own contract template and preferred terms would also reduce future risks notably. Moreover, people would be better aware of the content of the contract as each contract would not be so different.

Even though, in most of the situations the contract template comes from the supplier, only the biggest contracts go through legal inspection. Some of the respondents felt that there is no support available for this type of actions. This has led to buying legal services from external suppliers which obviously increase costs. The demand for legal inspections would reduce if the firm would use its own contract templates.

Advantages from involving Sourcing department are unquestionable

Many of the challenges regarding indirect purchasing are caused from internal challenges. Especially lack of standard processes and lack of time are large challenges in the case company. In addition, lack of cross-functional collaboration and lack of purchasing knowledge cause many problems. These internal challenges could be minimized by bringing purchasing expertise and category management to indirect purchasing.

The case company has a global Sourcing department which is responsible for direct purchases. It would be natural that the purchasing expertise would be brought from there to indirect purchases as well. This action has been taken already with logistics category and huge cost savings have already been achieved.

The biggest benefits from involving Sourcing department are in contracting, selecting suppliers and negotiating. The case company has faced challenges especially in selecting suppliers and making contracts when it comes to indirect purchasing. In addition, as negotiations are usually

performed unprofessionally, there is large development potential in negotiation phase. The biggest challenges seem to be right there, where the Sourcing department could contribute the most.

It is common that the end-users doing purchases only want purchasing department to negotiate good contracts and not to involve in defining the needs. The results of this study indicate that people do not want the Sourcing department to be involved in defining the needs and requirements. However, over 40 percent of the respondents had faced challenges in the specification phase.

If the Sourcing department is not involved from the early beginning, it leads to reactive role of the Sourcing and all potential opportunities cannot be achieved. Moreover, 70 percent of the value improvement potential lies in the specification phase (Johnson et al., 2011). Therefore, it is evident that the biggest advantages can be achieved by involving the Sourcing department early in the purchasing process.

At the moment collaboration between the Sourcing and other departments is very minimal when it comes to indirect purchases. However, most of the people would be willing to receive help from the Sourcing department and potential advantages are identified. There are also exceptions and therefore, one should be aware of potential internal resistance. The differences in size of internal resistance between departments are discussed in the next chapter in more detail.

Advantages of involving Sourcing include, for instance, making purchasing process more standardized and effective. The former is actually the biggest internal challenge in the company at the moment. Increased purchasing expertise would reduce risks, increase efficiency and help in exploiting volume benefits better. In addition, it would release resources of people to their full-time tasks.

Involving Sourcing will not happen without challenges and there are few things that should be taken into account. As the indirect purchasing process develops more systematic it can lead to slow and bureaucratic processes which should be avoided. In addition, Sourcing department should not be the one making decisions about the content of the service in demand but instead business units should be still responsible for that. The role of the Sourcing is more like ensuring that requirements and specifications are defined properly and to question the needs. Moreover, including Sourcing should not lead to cost being the only driver.

Significance of top management should not be underestimated and it is extremely important to have visible support from top management to succeed in developing indirect purchasing.

There is a huge cost savings potential in indirect purchasing

Most of the decisions in any company are based on financial calculations. Therefore, it is essential to calculate what the actual cost savings potential is for the company. In order to get some kind of estimation of the savings potential the values introduced by Rudzki et al. (2005) have been used. One should note that following figures (Table 23) are approximate. Logistics spend is omitted from the calculations.

Table 23 Indirect purchasing cost savings potential (adapted from Rudzki et al., 2005)

Category description	Savings opportunity		Category spend	Savings range	
	min	max		min	max
Indirect materials and services	10%	20%	20 425 115 €	2 042 511 €	4 085 023 €
Information technology	15%	30%	21 273 614 €	3 191 042 €	6 382 084 €
Professional services	8%	15%	42 361 997 €	3 388 960 €	6 354 300 €
Media/marketing/promotional items	10%	20%	32 609 563 €	3 260 956 €	6 521 913 €
Other indirects (nonproduction costs)	5%	15%	47 447 666 €	2 372 383 €	7 117 150 €
<i>Total savings range</i>				<i>14 255 853 €</i>	<i>30 460 469 €</i>
<i>Cost savings percentage</i>				<i>8,7%</i>	<i>18,6%</i>

The results show that the case company could save approximately from 14,3 MEUR to 30,5 MEUR by developing its indirect purchasing. That is from 8,7% to 18,6% of the total indirect spend. Even though the calculations are only approximate it is evident that the cost savings potential is huge and it would be surprising if the firm would have many equally potential cost savings projects to be implemented.

Real savings potential is dependent in many matters and it is unsure how well the values of Rudzki et al. (2005) fit to the case company. Therefore, another cost savings calculation was performed (Table 24). In this calculation also the percentage of addressable spend and potential compliance rate is taken into account. Values are based on a benchmark performed by the case company.

Table 24 Indirect purchasing cost savings potential based on company's benchmarking

Category description	Category spend	Addressable spend	Savings opportunity	Compliance	Savings range	
MRO and investments	14 556 181 €	50%	10-17%	90%	655 028 €	1 113 548 €
Professional services	13 077 376 €	50%	4-10%	90%	235 393 €	588 482 €
IT and telecom	21 273 614 €	50%	10-14%	90%	957 313 €	1 340 238 €
Personnel services	29 284 622 €	50%	7-10%	90%	922 466 €	1 317 808 €
Facilities management	36 972 872 €	80%	6-9%	90%	1 597 228 €	2 395 842 €
Travel and events	6 651 198 €	75%	4-12%	90%	179 582 €	538 747 €
Marketing and sales	32 609 563 €	50%	6-11%	90%	880 458 €	1 614 173 €
Other indirect costs	9 692 530 €	50%	5-10%	90%	218 082 €	436 164 €
<i>Total savings range</i>					<i>5 645 550 €</i>	<i>9 345 002 €</i>
<i>Cost savings percentage</i>					<i>3,4%</i>	<i>5,7%</i>

In the second calculation, estimation of the cost savings potential decreased and is now from 5,6 MEUR to 9,3 MEUR which is from 3,4% to 5,7% of the total indirect spend of the company. Even though the decrease is remarkable the cost savings potential is still huge and it should not be too difficult to get top management's attention on this project. Actually it might be good idea to start discussions with top management by showing the latter figures because too optimistic promises may lead to unnecessary pressure from the top management side during the project.

Implementation roadmap

Last but not least recommendations for the case company tell from which categories to start the development of indirect purchasing (Figure 20) and what are the first steps to be taken. The implementation roadmap suggestion is built on the model introduced by Pandit and Marmanis (2008).

Size of opportunity consists of two different variables: size of category spend and size of development potential. Five biggest indirect categories based on opportunity size are placed in above half of the model whereas five smallest are placed in bottom half. Implementation difficulty encompasses three different variables which were introduced in the earlier chapter. Once again five categories where the implementation difficulty seems to be lowest are placed on left hand side of the model and the rest are placed on right hand side.

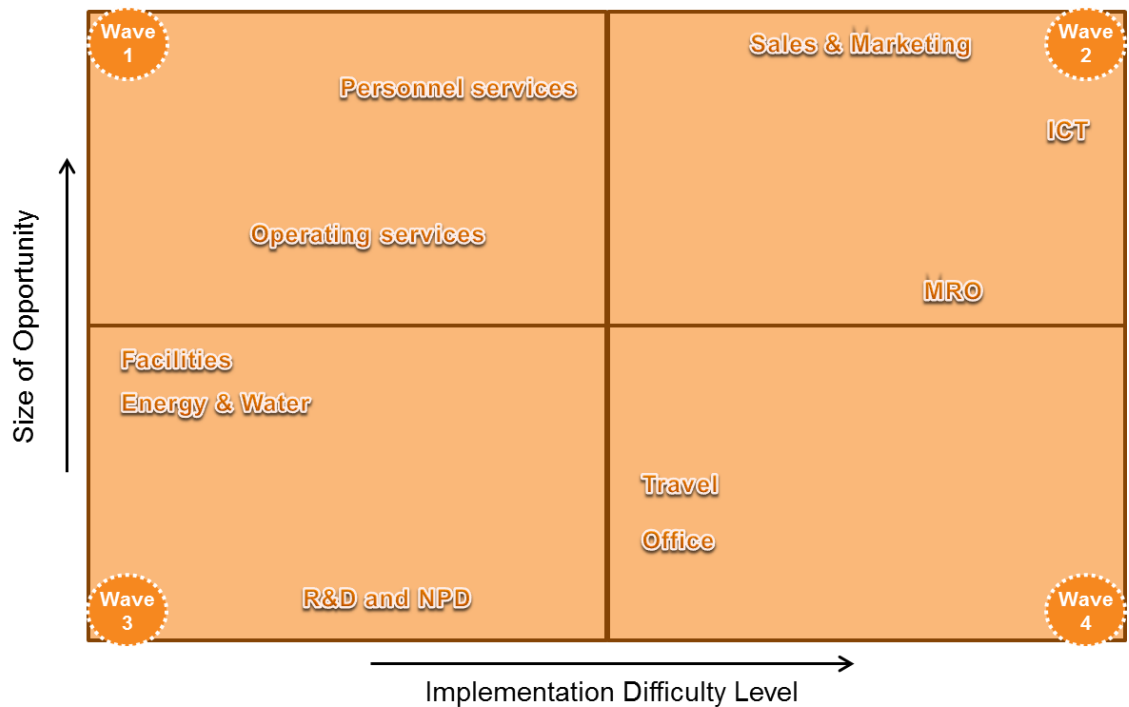


Figure 20 Implementation roadmap

The implementation roadmap suggests that the case company should start working from personnel services and operating services categories. In those categories development and cost savings potentials are high and there should not appear that much internal resistance. In the second wave there are three categories which have two common characteristics: development and savings potentials are high but the implementation will not be as easy as in the earlier categories. Succeeding in these categories will get much easier when one can show good results from earlier categories.

The questionnaire also showed that the development potential is higher in Finland than in other European countries. Also the implementation difficulty seems to be much lower in Finland. Therefore, the case company should start with initiatives that are most profitable in a country level. However, higher internal resistance is not a reason for not conducting initiatives in a global level if that is the most profitable way.

First steps to be taken

Personnel services and operating services are still too broad categories and they encompass wide variety of different goods and services. Therefore, those categories should be analyzed in more detail to identify the most potential opportunities within them. Personnel services consist of

many sub-categories, including temporary labor and healthcare. Respectively operating services include subcategories such as consulting and legal services. In order to find out the most potential sub-categories the case company needs to enhance the preciseness of the information in those categories. This can be done by making the classification for the spend management system in more detail.

After identifying the most potential projects the case company can make a decision of which project or projects to carry out first. Suitable amount of projects is dependent on resources that the firm is willing to sacrifice into developing indirect purchasing. When the projects have been chosen the current situation needs to be discovered. This study can be exploited in finding out who are making purchases within the chosen sub-categories. In addition all other stakeholders should be identified and current contracts need to be reviewed carefully.

Third step to be taken is to establish a cross-functional team which consists of all important stakeholders within the sub-category or project. This so called *category team* should then conduct a supplier market analysis and create a suitable category strategy. The content of the strategy varies greatly by categories and supplier markets. Whatever the strategy is, the category team will carry out it together from the beginning to the end.

It is difficult to estimate precisely what is the indirect purchasing development potential in the case company but this study has shown that there is a lot to be improved regarding indirect purchasing. It cannot be too much emphasized that there is always something to be improved and instead of fixing all the flaws once in and for all, the company should aim to continuous improvement. Otherwise it is probable that the company will gradually return to its old shape (Rozemeijer et al., 2003). Moreover, when the maturity of the sourcing department increases, it is able to identify even more development areas (Schiele, 2007).

5.2 Discussion and conclusions

The research problem of this study was to find out how indirect purchasing can be developed in a manufacturing company. There is no unambiguous answer to the research question but instead the current study discovered at least three different approaches for developing indirect purchasing. The approaches are enhancing availability and quality of the data, creating a controlling and managing model, and improving independent activities within the purchasing process.

It has been noticed in the earlier studies as well that improving reporting and quality of the data may lead to better purchasing or at least it gives prerequisites for developing it. Kapoor and Gupta (1997) argue that inadequate information is one of the reasons why indirect purchases are often poorly managed. This is the case especially in companies that have grown through several acquisitions. Also Iloranta and Pajunen-Muhonen (2012) have noticed scattered and inadequate reporting as a lost opportunity of passive purchasing. They consider purchasing in general in their publication and therefore the current study adds that it applies for indirect purchasing as well or in particular.

The current study raises an interesting observation. The availability and preciseness of the data is dependent on the point of view. The internal customers who are involved in indirect purchasing may be satisfied with the data in their hands but at the same time there might be no one with the visibility to indirect purchasing in the corporation level. Therefore, it is important to study the data in both levels as the current study has done.

The second approach for developing indirect purchasing is to create a controlling and managing model which aims for maximizing the benefits of the corporation instead of independent units. This finding supports arguments of Iloranta and Pajunen-Muhonen (2008) who have listed the most significant development methods for indirect purchasing, including creating a uniform purchasing strategy and policy, clarifying purchasing processes and methods, and centralized tendering for suppliers.

Improving independent activities within the purchasing process is the third and last development approach that was found in the current study. Kapoor and Gupta (1997) found that formal purchasing process is utilized to approve and negotiate purchases in only 20 percent of all indirect purchases. This study adds that only 33 percent of indirect purchases go through systematic purchasing process. However, the result cannot be generalized as such as the value is highly dependent on maturity of the indirect purchasing in the company.

The current study revealed three good approaches for developing indirect purchasing and the findings are in line with the extant literature. However, one should be aware that the approaches found in this study do not cover all of the development opportunities in indirect purchasing. There are most likely many other good approaches as well and on the other hand the findings from the case company may differ from the findings in other companies.

Bales and Fearon (1995) found that purchasing unit is usually involved in indirect purchasing in qualifying suppliers, negotiating and contracting. The current study shows that people conducting indirect purchases think that the purchasing unit could bring most advantages in the same phases. However, the current results should be assessed critically as internal customers often prefer the purchasing unit being mainly in a role of negotiator. That kind of role leads to reactive buying (Baily et al., 2005) and prevents an organization to exploit the most potential opportunities. Therefore, interviewing internal customers is not most likely the best choice when investigating the potential advantages of involving the purchasing unit.

The current study did not approach the development opportunities from the best practices perspective but instead it tried to identify the typical flaws in indirect purchasing. Van Weele (2010) has listed major bottlenecks and problems in the purchasing process based on several observations in different companies and institutions. Van Weele (2010) does not take a stand on whether the process encompasses direct or indirect purchases. The current study indicates that the problems are the same with indirect purchases.

Purchasing has been evolving from passive or reactive towards more proactive by its nature. If the findings of this study are compared to the lost opportunities of passive purchasing discovered by Iloranta and Pajunen-Muhonen (2012), it indicates that indirect purchasing is still passive by its nature. This claim cannot, however, be generalized in indirect purchases in every single company but instead the nature of indirect purchasing may vary greatly between companies based on, for instance, the maturity of the purchasing.

5.3 Limitations

As already mentioned there are some limitations regarding the current study and the findings should be reviewed critically. Even though the findings are in line with the extant literature this is a single case study by its nature. Therefore, the findings cannot be generalized into every company around the world without further studies. The results are most likely influenced by multiple factors, including industry, maturity of purchasing and size of the company. Nevertheless, it is likely that every company could improve their indirect purchasing more or less with one or more development approaches found in this study.

The findings of the current study represent mainly the European parts of the corporation. Spend analysis covers also North-America but no responses were gained from there in the management interviews or purchasing survey. There was only one response from the Asia area as well and

therefore it is possible that the development opportunities are different in those parts of the corporation.

The validity of a case study can be assessed also with construct and internal validity tests. The former test assesses whether a study measures what it is claimed to measure whereas the latter assesses if the inferences of the investigator are valid or not. The internal validity is a threat particularly in explanatory case studies. (Yin, 2009)

Items in the questionnaire were developed by the investigator and they have not been used in earlier studies. Even though the items were created based on findings from the extant literature there is always a possibility that they do not measure what they are supposed to measure. However, the current study comprises multiple sources of evidence and each finding is confirmed at least by two different sources. Therefore, the construct validity can be assumed to be high (Yin, 2009).

The questionnaire included probably at least one item that was not understood correctly by the respondents. There was found only few challenges regarding supplier relationship management. However, the management interviews and spend analysis indicated a lot of challenges in managing suppliers. Perhaps the concept supplier relationship management (SRM) should have been explained thoroughly to respondents as was done, for example, with the concept total cost of ownership (TCO).

The current study is not that much concerned with causal relationships and therefore the threat of low internal validity is not very large. In addition, the investigator have not been involved with the case company before the study and all inferences are made based on clear evidences presented in the spend analysis, qualitative interviews and questionnaire.

In addition to assessing the validity of the study one should also assess its reliability. If the study is reliable, other investigators are able to get the same findings and conclusions by following the same procedures. (Yin, 2009) The current study was able to follow the research design which was created in advance. Every step of the research is well documented and also many memos of the investigator's reasoning are written. Moreover, all of the interviews were recorded and transcribed. All of the documents are available for later inspections.

Small part of the findings is concerned with the differences between different departments. Those findings are suggestive by their nature and should be assessed critically. The number of respondents in each department is too low for the results to be statistically significant.

5.4 Subjects for further study

Limitations of the current study open great opportunities for further studies. First of all it would be interesting to replicate this study in one or two other companies to see if the results are the same. That would also increase the generalizability of the findings of this study (Yin, 2009). Moreover, the three different development approaches introduced in this study could be assessed so that one could say which of them leads to the biggest advantages.

The current study investigates indirect purchasing as a whole even though it consists of various goods and services with distinct characteristics. Procedures of this study could be used to study smaller areas as well, for instance, marketing services, consulting services or small supplies, just to mention few. That kind of studies could possibly show which of the development opportunities are present in purchasing some specific indirect goods or services.

List of References

- Angeles, R., & Nath, R., 2007. Business-to-business e-procurement: success factors and challenges to implementation. *Supply Chain Management: An International Journal*, 12(2), pp.104–115.
- Armstrong, J.S., & Overton, T.S., 1977. Estimating Nonresponse Bias in Mail Survey, *Journal of Marketing Research*, 14(3), pp. 396–402.
- Ashenbaum, B., 2006. Defining Cost Reduction and Cost Avoidance, Critical Issues Report, Tempe, AZ: CAPS Research.
- Baily, P., Farmer, D., Jesspo, D., & Jones, D., 2005. Purchasing Principles and Management, 9th ed., Harlow: Pearson Education Limited.
- Bals, L., Hartmann, E., & Ritter, T., 2009. Barriers of purchasing departments' involvement in marketing service procurement, *Industrial Marketing Management*, 38(8), pp.892–902.
- Bales, W.A., & Fearon, H.E., 1993. CEOs' / Presidents' Perceptions and Expectations of the Purchasing Function, Tempe, AZ: CAPS Research.
- Bryman, A., 1984. The Debate about Quantitative and Qualitative Research: A Question of Method or Epistemology?, *The British Journal of Sociology*, 35(1), pp.75–92.
- Burt, D.N., Dobler, D., & Starling, S.L., 2003. World Class Supply Management: The Key to Supply Chain Management, 7th ed., New York, NY: McGraw-Hill/Irwin.
- Carter, P., Beall, S., Rosetti, C., & Leduc, E., 2003. Indirect Spend, Critical Issues Report, Tempe, AZ: CAPS Research.
- Corbin, J., & Strauss, A., 2008. Basic of qualitative research: Techniques and procedures for developing grounded theory, 3rd ed., Thousand Oaks, CA: SAGE Publications, Inc.
- Cox, A., Chicksand, D., Ireland, P., & Davies, T., 2005. Sourcing indirect spend: A survey of current internal and external strategies for non-revenue-generating goods and services. *Journal of Supply Chain Management*, 41(2), pp.39–51.
- de Boer, L., Holmen, E., & Sitar, C.P., 2003a. Purchasing as an organizational design problem: the case of non-product-related items and services. *Management Decision*, 41(9), pp.911–922.

- de Boer, L., Ebben, M., & Sitar, C.P., 2003b. Studying purchasing specialization in organizations: a multi-agent simulation approach. *Journal of Purchasing and Supply Management*, 9(5-6), pp.199-206.
- De Paoli, T.M., 1999. Re-engineering Purchasing and Supply in Cavinato, J.L., & Kauffman, R.G., *The Purchasing Handbook: A Guide for the Purchasing and Supply Professional*, New York, NY: McGraw-Hill Companies, pp.311–329.
- Denzin, N.K., 2009. The research act: A theoretical introduction to sociological methods. *New Brunswick, NJ: Aldine Transaction*.
- Eisenhardt, K.M., 1989. Building Theories from Case Study Research. *Academy of Management Review*, 14(4), pp.532–550.
- Ellram, L.M., & Carr, A., 1994. Strategic Purchasing: A History and Review of the Literature, *International Journal of Purchasing and Materials Management*, 30(2), pp.10–18.
- Ellram, L.M., Tate, W.L., & Billington, C., 2007. Services Supply Management: The Next Frontier for Improved Organizational Performance, *California Management Review*, 49(4), pp.44–66.
- Farquhar, J.D., 2012. Case Study Research for Business, *London: SAGE Publications, Inc*.
- Fearon, H.E., & Bales, W.A., 1995. Purchasing of nontraditional goods and services, *Tempe, AZ: CAPS Research*.
- Guest, G., Namey, E.E., & Mitchell, M.L., 2013. Collecting Qualitative Data: A Field Manual for Applied Research. *London: SAGE Publications, Inc*.
- Haake, H., & Seuring, S., 2009. Sustainable Procurement of Minor Items – Exploring Limits to Sustainability. *Sustainable Development*, 17(5), pp.284–294.
- Hartmann, E., Kerkfeld, D., & Henke, M., 2012. Top and bottom line relevance of purchasing and supply management. *Journal of Purchasing and Supply Management*, 18(1), pp.22–34.
- Heikkilä, J., Vuori, M., & Laine A.T.L., 2013. Purchasing Business Services. *Tampere: Tammerprint Oy*. ISBN 978-952-238-114-9.

- Hirsjärvi, S., & Hurme, H., 2001. Tutkimushaastattelu. Teemahaastattelun teoria ja käytäntö. *Helsinki: Yliopistopaino*.
- Iloranta, K., & Pajunen-Muhonen, H., 2008. Hankintojen johtaminen: ostamisesta toimittajamarkkinoiden hallintaan, 1st ed., *Helsinki: Tietosanoma Oy*.
- Iloranta, K., & Pajunen-Muhonen, H., 2012. Hankintojen johtaminen: ostamisesta toimittajamarkkinoiden hallintaan, 3rd ed., *Helsinki: Tietosanoma Oy*.
- Johnson, P.F., & Leenders, M.R., 2004. Supply's Organizational Roles and Responsibilities, *Tempe, AZ: CAPS Research*.
- Johnson, P.F., Leenders, M.R., & Flynn, A.E., 2011. Purchasing and Supply Management, 14th ed., *New York, NY: The McGraw-Hill/Irwin*.
- Kapoor, V., & Gupta, A., 1997. Aggressive Sourcing: A Free-Market Approach. *MIT Sloan Management Review*, 39(1), pp.21–31.
- Karjalainen, K., Kemppainen, K., & van Raaij, E.M., 2009. Non-Compliant Work Behaviour in Purchasing: An Exploration of Reasons Behind Maverick Buying. *Journal of Business Ethics*, 85(2), pp.245–261.
- Koch, R., 1997. The 80/20 principle: the secret of achieving more with less. *London: Brealey*. ISBN 1-85788-167-2.
- Kraljic, P., 1983. Purchasing must become supply management a strategy for supply. *Harvard Business Review*, Sept-Oct, pp.109–117.
- Leenders, M.R., & Johnson, P.F., 2000. Major Structural Changes in Supply Organizations, *Tempe, AZ: CAPS Research*.
- Lysons, K., & Farrington, B., 2012. Purchasing and Supply Chain Management, 8th ed., *Harlow: Pearson Education Limited*.
- Monczka, R., Handfield, R., Giunipero, L., & Patterson, J., 2011. Purchasing and Supply Chain Management, *Mason, OH: South-Western Cengage Learning*.
- Nollet, J., Calvi, R., Audet, E., & Côté, M., 2008. When excessive cost savings measurement drowns the objectives. *Journal of Purchasing and Supply Management*, 14(2), pp.125–135.

- Novack, R.A., & Simco, S.W., 1991. The Industrial Procurement Process: A Supply Chain Perspective, *Journal of Business Logistics*, 12(1), pp.145–167.
- Pandit, K., & Marmanis, H., 2008. Spend analysis: the window into strategic sourcing, *Fort Lauderdale, FL: J. Ross Publishing*.
- Payne, J., & Dorn, Jr., W.R., 2012. Managing Indirect Spend: Enhancing Profitability through Strategic Sourcing. *New Jersey, NJ: John Wiley & Sons*. ISBN 978-1-118-13145-9 (ebk).
- Porter, M.E., 1985. Competitive Advantage: Creating and Sustaining Superior Performance, *New York, NY: The Free Press*.
- Porter, M.E., 1996. What is strategy? *Harvard Business Review*, 74(6), pp.61–78.
- Porter, A.M., 1999. Taking control of ‘indirect’ corporate spending. *Purchasing Magazine*, September, pp.55–60.
- Reck, R.F., & Long, B.G., 1988. Purchasing: A Competitive Weapon. *Journal of Purchasing and Materials Management*, 24(3), pp.2–8.
- Reinecke, N., Spiller, P., & Ungerman, D., 2007. The talent factor in purchasing. *The McKinsey Quarterly*, 1, pp.6–9.
- Rozemeijer, F.A., van Weele, A., & Weggeman, M., 2003. Creating Corporate Advantage through Purchasing: Toward a Contingency Model. *Journal of Supply Chain Management*, 39(1), pp.4–13.
- Rudzki, R.A., Smock, D.A., Katzorke, M., & Stewart, Jr., S., 2005. Straight to the Bottom Line: An Executive’s Roadmap to World Class Supply Management. *Fort Lauderdale, FL: J. Ross Publishing*.
- Rudzki, R.A., & Trent, R.J., 2011. Next Level Supply Management Excellence: Your Straight to the Bottom Line Roadmap. *Fort Lauderdale, FL: J. Ross Publishing*.
- Ruusuvuori, J., & Tiittula, L., 2005. Haastattelu. Tutkimus, tilanteet ja vuorovaikutus. *Tampere: Vastapaino*.

Schiele, H., 2007. Supply-management maturity, cost savings and purchasing absorptive capacity: Testing the procurement-performance link. *Journal of Purchasing and Supply Management*, 13(4), pp.274–293.

Schiele, H., Horn, P., & Vos, B., 2011. Estimating cost-saving potential from international sourcing and other sourcing levers: Relative importance and trade-offs, *International Journal of Physical Distribution and Logistics Management*, 41(3), pp.315–336.

Scholz, R.W., & Tietje, O., 2002. Embedded Case Study Methods. *Thousand Oaks, CA: SAGE Publications, Inc.*

Slack, N., Brandon-Jones, A., & Johnston, R., 2011. Essentials of Operations Management, *Harlow: Pearson Education Limited.*

Snow, C.C., & Thomas, J.B., 1994. Field research methods in strategic management: Contributions to theory building and testing. *Journal of Management Studies*, 31(4), pp.457–480.

Tate, W.L., Ellram, L.M., Bals, L., Hartmann, E., & van der Valk, W., 2010. An Agency Theory perspective on the purchase of marketing services. *Industrial Marketing Management*, 39(5), pp.806–819.

Van Weele, A.J., 2010. Purchasing and Supply Chain Management, 5th ed., *London: Cengage Learning.*

Wellington, J., & Szczerbinski, M., 2007. Research Methods for the Social Sciences. *London: Continuum International Publishing Group.*

Yin, R.K., 2009. Case Study Research: Design and Methods, 4th ed., *London: SAGE Publications, Inc.*

Appendix 1: List of interviews

Date	Function	Duration
29.05.2015	Sourcing	1 h 14 min
02.06.2015	Human Resources	40 min
05.06.2015	Finance/Accounting	56 min
05.06.2015	Production	52 min
10.06.2015	NPD / R&D	56 min
11.06.2015	Production	52 min
12.06.2015	Information Technology	50 min
16.06.2015	Marketing	27 min
17.06.2015	Marketing	43 min
18.06.2015	Human Resources	47 min
22.06.2015	Marketing	53 min
24.06.2015	Facilities	51 min
26.06.2015	Marketing	32 min

Appendix 2: Main interview questions

Background information

1. Tell me about yourself?
2. Describe how your function is located within the corporation.
3. What kind of products and services you are purchasing?

Purchasing process

4. Describe your typical purchasing process.
5. How do you define your own needs for products or services?
6. How do you follow supplier markets?
7. How do you search for new suppliers?
8. What kind of basic requirements you have for suppliers?
9. How do you define requirements for suppliers?
10. How do you choose a supplier?
11. How many requests for quotation you typically send?
12. Describe your typical negotiation process.
13. What kind of contract you make with suppliers?
14. Describe your purchase to pay process.
15. How spending of money is followed in your function?
16. How do you manage your supplier relationships?
17. How do you follow up and evaluate the performance of your suppliers?

Miscellaneous

18. What kind of challenges you have had regarding purchasing?
19. Describe your cooperation with the Global Sourcing function.
20. What kind of advantages Sourcing function could bring to your purchasing process?
21. What kind of disadvantages Sourcing function could bring to your purchasing process?

Appendix 3: Questionnaire structure

Background questions

1. Survey reporting department
2. Survey reporting country
3. How would you rate your experience regarding purchasing (1 – 5)?
4. I have been involved in purchasing of indirect goods or services in the case company within the last 12 months (yes/no)

Management of indirect purchasing (yes/no/I don't know)

5. Is there a company-wide strategy created for purchasing of indirect goods and services?
6. Has your department created a strategy for purchasing of indirect goods and services?
7. Is purchasing of indirect goods and services performed through systematic purchasing process in Company?
8. Is there sufficiently precise information available regarding the indirect purchases made by your department?

Process of indirect purchasing (“1” = strongly disagree – “5” = strongly agree)

9. Requirements and specifications are defined internally before contacting suppliers
10. Specifications are written in general terms, rather than directing them for one specific supplier or brand
11. Supplier markets are analyzed continuously even if the current supplier can meet the needs
12. The background of the supplier is adequately checked (e.g. quality, references, financial condition, etc.)
13. Buying decisions are based upon total cost of ownership (TCO), rather than price
14. Suppliers are selected based on rational reasons, rather than personal relationships
15. All supplier market opportunities are attempted to search, instead of needing to settle for the first supplier candidates (e.g. due to rush)
16. We keep a list of potential suppliers which is actively updated
17. All the risks and cost factors are analyzed in order to prepare for the negotiations
18. The strategy and tactics are considered and performed thoroughly in order to succeed in the negotiations

19. Instead of only discussing about the content of the product or service, negotiations also aim to better price
20. A written contract is always signed with the supplier, instead of using verbal contracts
21. Company/region wide frame agreements are placed with suppliers whenever suitable
22. The contract is primarily drafted by Company, instead of using supplier's own legal terms and conditions
23. Contracts are passed through legal scrutiny
24. A purchase order with a purchase order number is produced when making an order for indirect good or service
25. Invoices are matched with the original purchase order and delivery document
26. Order-to-invoice payment process of the company is efficient and minimizes the transactions costs of indirect purchasing
27. Supplier performance is systematically evaluated and documented
28. Suppliers have been assessed in order to find out the strategic partners
29. Supplier relationships are actively developed with the strategic partners
30. Performance of the supplier is evaluated even if there has not occurred any problems

Challenges regarding indirect purchasing

31. In which stages of purchasing indirect goods and services you have faced challenges?
32. Have you faced any of these internal challenges when it comes to purchasing indirect goods and services?
33. Can you identify any other challenges when it comes to purchasing indirect goods and services in Company?

Involving Sourcing department in purchasing of indirect goods and services

34. It would evoke positive thoughts, if someone from Sourcing department would be involved in our indirect purchasing process (1 – 5)
35. Involving Sourcing department in purchasing of indirect goods and services would bring advantages to the Company (1 – 5)
36. In which stages of the purchasing process the Sourcing department could bring advantages?
37. In my opinion, Company should pay more attention to indirect purchasing and start developing it (yes/no)